

# Fitchburg Gas and Electric Light Company d/b/a Unitil

## Non-Emergency Calls(1) - Gas & Electric Divisions: 1998 - 2005

Month	Total # Service & Billing Calls Received	Total # Service & Billing Calls Answered within 20 seconds	% Service & Billing Answered within 20 seconds
Jan-05	12294	10461	85.1%
Feb-05	11499	9820	85.4%
Mar-05	14338	11824	82.5%
Apr-05	16827	10507	62.4%
May-05	18264	10085	55.2%
Jun-05	18490	10004	54.1%
Jul-05	15972	10577	66.2%
Aug-05	17376	10595	61.0%
Sep-05	17202	10735	62.4%
Oct-05	17859	11846	66.3%
Nov-05	14526	11183	77.0%
Dec-05	13037	10837	83.1%
<b>Total 05</b>	<b>187,684</b>	<b>128,474</b>	<b>68.5%</b>
Jan-04	16782	14429	86.0%
Feb-04	13300	11256	84.6%
Mar-04	15450	12819	83.0%
Apr-04	18402	11012	59.8%
May-04	17380	11573	66.6%
Jun-04	18556	12737	68.6%
Jul-04	16906	12030	71.2%
Aug-04	16796	12526	74.6%
Sep-04	16811	14087	83.8%
Oct-04	16797	12722	75.7%
Nov-04	14776	11329	76.7%
Dec-04	11532	9888	85.7%
<b>Total 04</b>	<b>193,488</b>	<b>146,408</b>	<b>75.7%</b>
Jan-03	16805	10623	63.2%
Feb-03	13328	9019	67.7%
Mar-03	15435	11268	73.0%
Apr-03	16620	11263	67.8%
May-03	17766	9322	52.5%
Jun-03	20342	7907	38.9%
Jul-03	19143	12684	66.3%
Aug-03	19022	10601	55.7%
Sep-03	18808	13069	69.5%
Oct-03	25090	19368	77.2%
Nov-03	16303	14161	86.9%
Dec-03	18905	14871	78.7%
<b>Totals 03</b>	<b>217,567</b>	<b>144,156</b>	<b>66.3%</b>
Jan-02	15207	9547	62.8%
Feb-02	11505	9230	80.2%
Mar-02	14411	11362	78.8%
Apr-02	18687	10554	56.5%
May-02	19801	11547	58.3%
Jun-02	15767	9590	60.8%
Jul-02	19703	13301	67.5%
Aug-02	17393	11580	66.6%
Sep-02	16981	9611	56.6%
Oct-02	18310	10728	58.6%
Nov-02	17075	11390	66.7%
Dec-02	16104	10982	68.2%
<b>Totals 02</b>	<b>200,944</b>	<b>129,422</b>	<b>64.4%</b>

Month	Total # Service & Billing Calls Received	Total # Service & Billing Calls Answered within 20 seconds	% Service & Billing Answered within 20 seconds
Jan-01	14,204	9,193	64.7%
Feb-01	14,523	9,285	63.9%
Mar-01	15,847	10,966	69.2%
Apr-01	15,544	8,609	55.4%
May-01	17,887	10,105	56.5%
Jun-01	20,574	8,571	41.7%
Jul-01	18,184	11,048	60.8%
Aug-01	18,912	12,336	65.2%
Sep-01	16,333	11,253	68.9%
Oct-01	17,595	11,834	67.3%
Nov-01	14,780	10,871	73.6%
Dec-01	12,802	10,079	78.7%
<b>Totals 01</b>	<b>197,185</b>	<b>124,150</b>	<b>63.0%</b>
Jan-00	13,707	7,442	54.3%
Feb-00	11,578	5,755	49.7%
Mar-00	14,428	9,521	66.0%
Apr-00	16,264	6,953	42.8%
May-00	17,249	7,420	43.0%
Jun-00	16,490	8,725	52.9%
Jul-00	14,228	7,051	49.6%
Aug-00	14,750	8,255	56.0%
Sep-00	14,801	7,460	50.4%
Oct-00	15,193	6,376	42.0%
Nov-00	13,078	6,623	50.6%
Dec-00	15,572	9,767	62.7%
<b>Totals 00</b>	<b>177,338</b>	<b>91,348</b>	<b>51.5%</b>
Jan-99	17,320	10,277	53.4%
Feb-99	13,406	7,830	53.1%
Mar-99	15,422	8,933	52.5%
Apr-99	17,727	7,754	38.9%
May-99	14,786	6,754	41.2%
Jun-99	16,946	6,250	31.4%
Jul-99	20,689	8,521	34.3%
Aug-99	15,710	8,461	51.3%
Sep-99	18,464	8,274	43.5%
Oct-99	16,285	7,161	43.3%
Nov-99	13,595	7,229	52.1%
Dec-99	14,898	7,846	50.4%
<b>Totals 99</b>	<b>195,248</b>	<b>95,290</b>	<b>48.8%</b>
Jan-98			n/a
Feb-98			n/a
Mar-98			n/a
Apr-98	9,910	4,763	48.1%
May-98	8,430	4,122	48.9%
Jun-98	18,899	8,782	41.3%
Jul-98	16,497	7,862	42.6%
Aug-98	16,272	6,165	33.6%
Sep-98	16,479	5,207	26.7%
Oct-98	17,663	6,736	32.6%
Nov-98	14,527	9,488	60.0%
Dec-98	15,174	10,199	62.6%
<b>Totals 98</b>	<b>133,851</b>	<b>63,324</b>	<b>47.3%</b>

(1) The Unitil Customer Service Center handles calls for FG&E and Unitil's NH distribution company. Therefore, the number of calls reflects the total number of calls received for all the Unitil Companies.

**Fitchburg Gas and Electric Light Company d/b/a Unitil**  
**Emergency Calls - Electric Division: 2001 - 2005**

Month	Total # Calls (Electric)	Total # Answered < 20 seconds	% Electric Answered < 20 seconds
Jan-05	156	124	79.5%
Feb-05	121	104	86.0%
Mar-05	188	139	73.9%
Apr-05	174	117	67.2%
May-05	192	126	65.6%
Jun-05	261	159	60.9%
Jul-05	243	165	67.9%
Aug-05	175	124	70.9%
Sep-05	205	143	69.8%
Oct-05	316	191	60.4%
Nov-05	176	124	70.5%
Dec-05	161	136	84.5%
<b>Total 05</b>	<b>2368</b>	<b>1652</b>	<b>69.8%</b>
Jan-04	64	50	78.1%
Feb-04	93	84	90.3%
Mar-04	44	33	75.0%
Apr-04	164	105	64.0%
May-04	135	107	79.3%
Jun-04	247	192	77.7%
Jul-04	319	221	69.3%
Aug-04	255	196	76.9%
Sep-04	206	168	81.6%
Oct-04	218	161	73.9%
Nov-04	243	197	81.1%
Dec-04	309	236	76.4%
<b>Total 04</b>	<b>2297</b>	<b>1750</b>	<b>76.2%</b>
Jan-03	103	56	54.4%
Feb-03	53	35	66.0%
Mar-03	48	35	72.9%
Apr-03	111	58	52.3%
May-03	165	63	38.2%
Jun-03	481	175	36.4%
Jul-03	249	71	28.5%
Aug-03	210	81	38.6%
Sep-03	78	39	50.0%
Oct-03	1196	734	61.4%
Nov-03	107	50	46.7%
Dec-03	44	32	72.7%
<b>Total 03</b>	<b>2845</b>	<b>1429</b>	<b>50.2%</b>

Month	Total # Calls (Electric)	Total # Answered < 20 seconds	% Electric Answered < 20 seconds
Jan-02	173	125	72.3%
Feb-02	214	144	67.3%
Mar-02	228	157	68.9%
Apr-02	189	72	38.1%
May-02	641	264	41.2%
Jun-02	529	163	30.8%
Jul-02	64	38	59.4%
Aug-02	355	161	45.4%
Sep-02	346	162	46.8%
Oct-02	191	92	48.2%
Nov-02	692	290	41.9%
Dec-02	61	35	57.4%
<b>Total 02</b>	<b>3683</b>	<b>1703</b>	<b>46.2%</b>
Jan-01			
Feb-01			
Mar-01			
Apr-01			
May-01			
Jun-01			
Jul-01			
Aug-01			
Sep-01	104	56	53.8%
Oct-01	161	124	77.0%
Nov-01	256	174	68.0%
Dec-01	119	99	83.2%
<b>Total 01</b>	<b>640</b>	<b>453</b>	<b>70.8%</b>

# Fitchburg Gas and Electric Light Company d/b/a Unitil

Service Appointments Met As Scheduled - Electric Division: 2000 - 2005

	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-05	272	269	98.9%
February-05	252	248	98.4%
March-05	259	255	98.5%
April-05	294	293	99.7%
May-05	284	282	99.3%
June-05	332	330	99.4%
July-05	274	271	98.9%
August-05	351	349	99.4%
September-05	353	348	98.6%
October-05	320	316	98.8%
November-05	285	285	100.0%
December-05	297	293	98.7%
<b>Total</b>	<b>3573</b>	<b>3539</b>	<b>99.0%</b>
	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-04	242	241	99.6%
February-04	207	206	99.5%
March-04	282	278	98.6%
April-04	265	264	99.6%
May-04	267	265	99.3%
June-04	323	322	99.7%
July-04	298	295	99.0%
August-04	281	278	98.9%
September-04	315	313	99.4%
October-04	300	299	99.7%
November-04	367	366	99.7%
December-04	273	270	98.9%
<b>Total</b>	<b>3420</b>	<b>3397</b>	<b>99.3%</b>
	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-03	156	156	100.0%
February-03	188	188	100.0%
March-03	203	202	99.5%
April-03	189	188	99.5%
May-03	262	262	100.0%
June-03	265	263	99.2%
July-03	256	253	98.8%
August-03	202	200	99.0%
September-03	232	232	100.0%
October-03	327	324	99.1%
November-03	328	323	98.5%
December-03	326	322	98.8%
<b>Total</b>	<b>2934</b>	<b>2913</b>	<b>99.3%</b>

	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-02	164	163	99.4%
February-02	75	75	100.0%
March-02	103	103	100.0%
April-02	204	202	99.0%
May-02	275	272	98.9%
June-02	211	209	99.1%
July-02	194	194	100.0%
August-02	263	263	100.0%
September-02	241	240	99.6%
October-02	236	236	100.0%
November-02	247	247	100.0%
December-02	291	291	100.0%
<b>Total</b>	<b>2504</b>	<b>2495</b>	<b>99.6%</b>
	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-01	169	168	99.4%
February-01	189	185	97.9%
March-01	250	244	97.6%
April-01	234	232	99.1%
May-01	290	290	100.0%
June-01	317	310	97.8%
July-01	312	307	98.4%
August-01	328	328	100.0%
September-01	252	248	98.4%
October-01	291	289	99.3%
November-01	143	138	96.5%
December-01	190	187	98.4%
<b>Total</b>	<b>2965</b>	<b>2926</b>	<b>98.7%</b>
	Total Electric Appointments	Total Electric met on Schedule	% Electric met on Schedule
January-00	337	334	99.1%
February-00	277	276	99.6%
March-00	296	291	98.3%
April-00	255	254	99.6%
May-00	408	400	98.0%
June-00	367	360	98.1%
July-00	320	313	97.8%
August-00	214	210	98.1%
September-00	224	219	97.8%
October-00	245	237	96.7%
November-00	245	244	99.6%
December-00	188	187	99.5%
<b>Total</b>	<b>3376</b>	<b>3325</b>	<b>98.5%</b>

# Fitchburg Gas and Electric Light Company d/b/a Unitil

## On-Cycle Meter Readings - Electric Division: 1998 - 2005

Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-05	26,986	2,071	24,915	92.3%
February-05	26,966	2,890	24,076	89.3%
March-05	26,965	1,444	25,521	94.6%
April-05	26,906	722	26,184	97.3%
May-05	26,829	879	25,950	96.7%
June-05	26,754	784	25,970	97.1%
July-05	26,772	921	25,851	96.6%
August-05	26,777	916	25,861	96.6%
September-05	26,774	739	26,035	97.2%
October-05	26,868	634	26,234	97.6%
November-05	26,967	1,016	25,951	96.2%
December-05	27,067	2,222	24,845	91.8%
<b>Total 2005</b>	<b>322,631</b>	<b>15,238</b>	<b>307,393</b>	<b>95.3%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-04	26,675	1,421	25,254	94.7%
February-04	26,723	844	25,879	96.8%
March-04	26,656	569	26,087	97.9%
April-04	26,685	1,109	25,576	95.8%
May-04	26,685	692	25,993	97.4%
June-04	26,605	633	25,972	97.6%
July-04	26,557	867	25,690	96.7%
August-04	26,684	752	25,932	97.2%
September-04	26,634	882	25,752	96.7%
October-04	26,666	865	25,801	96.8%
November-04	26,654	1,008	25,646	96.2%
December-04	26,766	1,381	25,385	94.8%
<b>Total 2004</b>	<b>319,990</b>	<b>11,023</b>	<b>308,967</b>	<b>96.6%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-03	26,375	1,243	25,132	95.3%
February-03	26,430	1,203	25,227	95.4%
March-03	26,471	1,066	25,405	96.0%
April-03	26,416	761	25,655	97.1%
May-03	26,397	672	25,725	97.5%
June-03	26,349	631	25,718	97.6%
July-03	26,462	717	25,745	97.3%
August-03	26,436	695	25,741	97.4%
September-03	26,392	777	25,615	97.1%
October-03	26,405	2,111	24,294	92.0%
November-03	26,368	677	25,691	97.4%
December-03	26,478	816	25,662	96.9%
<b>Total 2003</b>	<b>316,979</b>	<b>11,369</b>	<b>305,610</b>	<b>96.4%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-02	26,129	869	25,260	96.7%
February-02	26,169	878	25,291	96.6%
March-02	26,168	754	25,414	97.1%
April-02	26,156	777	25,379	97.0%
May-02	26,102	841	25,261	96.8%
June-02	26,150	872	25,278	96.7%
July-02	26,197	759	25,438	97.1%
August-02	26,194	878	25,316	96.6%
September-02	26,210	759	25,451	97.1%
October-02	26,252	701	25,551	97.3%
November-02	26,250	823	25,427	96.9%
December-02	26,197	907	25,290	96.5%
<b>Total 2002</b>	<b>314,174</b>	<b>9,818</b>	<b>304,356</b>	<b>96.9%</b>

Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-01	25,929	2,070	23,859	92.0%
February-01	25,872	1,961	23,911	92.4%
March-01	25,926	1,951	23,975	92.5%
April-01	25,908	1,120	24,788	95.7%
May-01	25,913	945	24,968	96.4%
June-01	25,752	816	24,936	96.8%
July-01	25,862	544	25,318	97.9%
August-01	25,851	563	25,288	97.8%
September-01	25,905	555	25,350	97.9%
October-01	25,900	512	25,388	98.0%
November-01	25,928	616	25,312	97.6%
December-01	26,023	609	25,414	97.7%
<b>Total 2001</b>	<b>310,769</b>	<b>12,262</b>	<b>298,507</b>	<b>96.1%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-00	25,532	3,913	21,619	84.7%
February-00	25,621	2,037	23,584	92.0%
March-00	25,634	1,286	24,348	95.0%
April-00	25,666	1,299	24,367	94.9%
May-00	25,551	1,473	24,078	94.2%
June-00	25,517	1,153	24,364	95.5%
July-00	25,567	1,175	24,392	95.4%
August-00	25,592	985	24,607	96.2%
September-00	25,620	951	24,669	96.3%
October-00	25,623	984	24,639	96.2%
November-00	25,728	899	24,839	96.5%
December-00	25,819	2,510	23,309	90.3%
<b>Total 2000</b>	<b>307,470</b>	<b>18,655</b>	<b>288,815</b>	<b>93.9%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-99	25,334	4,660	20,674	81.6%
February-99	25,379	2,277	23,102	91.0%
March-99	25,353	1,372	23,981	94.6%
April-99	23,942	1,381	22,561	94.2%
May-99	25,357	1,331	24,026	94.8%
June-99	25,247	762	24,485	97.0%
July-99	25,303	618	24,685	97.6%
August-99	25,341	660	24,681	97.4%
September-99	25,338	501	24,837	98.0%
October-99	24,877	415	24,462	98.3%
November-99	24,871	520	24,351	97.9%
December-99	25,449	1,021	24,428	96.0%
<b>Total 1999</b>	<b>301,791</b>	<b>15,518</b>	<b>286,273</b>	<b>94.9%</b>
Month / Year	Total Meters	# Estimated	# Actual	% On-Cycle
January-98	25,231	4,467	20,764	82.3%
February-98	25,221	3,344	21,877	86.7%
March-98	25,210	2,129	23,081	91.6%
April-98	25,171	1,538	23,633	93.9%
May-98	25,105	1,595	23,510	93.6%
June-98	25,099	2,012	23,087	92.0%
July-98	25,121	3,457	21,664	86.2%
August-98	25,150	3,063	22,097	87.9%
September-98	25,164	2,720	22,444	89.2%
October-98	25,169	1,586	23,583	93.7%
November-98	25,153	2,870	22,283	88.6%
December-98	25,177	3,672	21,505	85.4%
<b>Total 1998</b>	<b>301,971</b>	<b>32,443</b>	<b>269,528</b>	<b>89.3%</b>

2003 CONSUMER DIVISION CASES			
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Cases *	Referrals *
ELECTRIC	FITCHBURG GAS & ELECTRIC	0	0
GAS	FITCHBURG GAS & ELECTRIC	84	39

2004 CONSUMER DIVISION CASES			
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Cases *	Referrals *
ELECTRIC	FITCHBURG GAS & ELECTRIC	0	0
GAS	FITCHBURG GAS & ELECTRIC	48	22

2005 CONSUMER DIVISION CASES			
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Cases *	Referrals *
ELECTRIC	FITCHBURG GAS & ELECTRIC	0	0
GAS	FITCHBURG GAS & ELECTRIC	32	30

\* Data obtained and summarized from the monthly MDTE "Crosstab Report-Consumer Database" reports.

**2002**

INDUSTRYDESCRIPTION	COMPANY_DESCRIPTION	Cases
ELECTRIC	BOSTON EDISON	1050
	CAMBRIDGE ELECTRIC	15
	COM ELECTRIC	317
	MASSACHUSETTS ELECTRIC	815
	NANTUCKET ELECTRIC	2
	WESTERN MASS ELECTRIC	213
GAS	BAYSTATE GAS	363
	BERKSHIRE GAS	21
	BLACKSTONE GAS	4
	BOSTON GAS	327
	COLONIAL GAS CAPE	88
	COLONIAL GAS LOWELL	34
	COMMONWEALTH GAS	104
	ESSEX COUNTY GAS	9
	FALL RIVER GAS	50
	FITCHBURG GAS & ELECTRIC	58

Note: Data extracted from MDTE file.

# MONTHLY CASES 2001

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mo. Avg.	TOTAL
<b>CABLE</b>														
ATT Broadband	66	55	104	80	112	68	175	206	112	144	348	189	138	1659
Adelphia	9	5	2	17	16	9	12	13	4	3	1	6	8	97
CableVision	8	2	4	1	2	0	0	0	0	0	0	0	1	17
Century		0	0	0	0	1	0	0	0	0	1	0	0	2
Charlemont	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Charter	15	3	6	8	0	5	6	10	4	1	7	5	6	70
Cox	1	0	0	0	0	0	0	0	0	0	0	0	0	1
RCN	0	1	0	0	2	1	2	2	0	1	0	2	1	11
Time Warner	0	1	0	0	1	0	0	1	0	0	1	2	1	6
<b>Cable Total</b>	<b>100</b>	<b>67</b>	<b>116</b>	<b>106</b>	<b>133</b>	<b>84</b>	<b>195</b>	<b>232</b>	<b>120</b>	<b>149</b>	<b>358</b>	<b>204</b>	<b>155</b>	<b>1864</b>
<b>ELECTRIC</b>														
BE	34	36	53	37	120	66	194	235	182	148	116	121	112	1342
Camb	0	0	0	0	1	0	0	0	0	1	0	0	0	2
CE	22	14	19	9	31	28	40	25	41	35	22	15	25	301
ME	66	47	63	83	123	109	103	146	132	112	83	87	96	1154
NE	0	0	0	0	1	0	1	0	0	0	0	0	0	2
WME	11	4	10	14	29	24	29	28	19	28	20	11	19	227
MUN ELE	7	2	5	8	13	11	8	8	10	11	9	4	8	96
<b>Electric Total</b>	<b>140</b>	<b>103</b>	<b>150</b>	<b>151</b>	<b>318</b>	<b>238</b>	<b>375</b>	<b>442</b>	<b>384</b>	<b>335</b>	<b>250</b>	<b>238</b>	<b>260</b>	<b>3124</b>
<b>GAS</b>														
BSG	22	27	19	27	16	39	26	31	26	31	19	24	26	307
BKG	0	0	1	1	1	5	4	2	0	3	4	0	2	21
BLG	0	0	0	0	1	0	1	0	0	0	0	0	0	2
BG	27	14	24	33	29	36	29	19	50	52	35	28	31	376
CGC	2	12	1	18	14	13	12	4	11	8	6	11	9	112
CGL	4	1	1	2	4	6	1	5	8	4	1	2	3	39
CG	18	9	16	9	23	16	20	16	15	11	7	1	13	161
ECG	0	3	1	0	2	1	1	4	7	1	2	1	2	23
FRG	3	1	5	1	2	8	6	7	6	4	5	2	4	50
FGE	2	2	3	3	6	12	13	2	6	7	6	6	6	68
MUN GAS	0	1	1	0	1	0	1	1	0	0	0	0	0	5
NAG	0	1	0	0	0	0	1	0	0	1	0	0	0	3
OTG	1	0	1	0	1	0	0	2	0	0	0	0	0	5
<b>Gas Total</b>	<b>79</b>	<b>71</b>	<b>73</b>	<b>94</b>	<b>100</b>	<b>136</b>	<b>115</b>	<b>93</b>	<b>129</b>	<b>122</b>	<b>85</b>	<b>75</b>	<b>98</b>	<b>1172</b>
<b>WATER</b>														
WATER	3	3	2	4	4	1	1	5	2	2	2	0	2	29
<b>Water Total</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>29</b>
<b>OTHER</b>														
OTHER	5	2	1	2	3	3	3	0	0	1	0	1	2	21
<b>Other Total</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>21</b>
<b>SUPPLIERS</b>														
SUPPLIERS	6	6	11	13	4	5	3	2	4	1	3	1	5	59
<b>Supp. Total</b>	<b>6</b>	<b>6</b>	<b>11</b>	<b>13</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>59</b>

# Annual Statistics 2001

Company	Inquiries	Cases	Adjustments
Adelphia	133	97	\$ 1,730.11
ATT BB	8045	1659	\$ 22,919.00
Media One			\$ 1,538.00
Avalon	1		
CableVision	93	17	\$ 278.00
Century	63	2	
Charlemont	56	1	
Charter	1421	77	\$ 418.10
Cox		1	
CVI-TWC	4		
Greater Media	11		
Inland	1		
RCNC	12	11	\$ 668.54
Shrewsbury	4		
Time Warner		6	
<b>Cable Total</b>	<b>9844</b>	<b>1871</b>	<b>\$ 27,552.76</b>
BE	2599	1342	\$ 65,008.72
CAMB	6	2	
CE	249	301	\$ 2,482.03
EE	10		
ME	4123	1154	\$ 44,583.08
NE	1	2	
WME	590	227	\$ 2,838.10
MUN ELEC	224	96	\$ 1,363.79
<b>Electric total</b>	<b>7802</b>	<b>3124</b>	<b>\$ 116,275.72</b>
<b>SUPPLIERS</b>			
SUPPLIERS	88	59	\$ 218.82
<b>Suppliers Total</b>	<b>88</b>	<b>59</b>	<b>\$ 218.82</b>
BSG	563	307	\$ 54,122.39
BKG	68	21	

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To: Mark Lambert  
 From: Karen Robinson  
 Co: DTE Consumer Dr.  
 Dept: 817 305-3631  
 Fax: 403 227-4664



## Annual Statistics 2001

BLG	2	2	
BG	1751	376	\$ 10,555.22
CGC	108	112	\$ 12,086.80
CGL	33	39	\$ 6,360.46
CG	110	161	\$ 2,204.03
ECG	16	23	
FRG	93	50	\$ 583.25
FGE	51	68	
NAG	1	3	\$ 85,921.20
OTG	16	5	
MUN GAS	9	5	
<b>Gas Total</b>	<b>2258</b>	<b>1172</b>	<b>\$ 85,921.20</b>
WATER	77	29	\$ 1,113.27
<b>Water Total</b>	<b>77</b>	<b>29</b>	<b>\$ 1,113.27</b>
<b>Company</b>	<b>TOTAL</b>		
Adelphia		2	
Advantage Tele.	1	1	\$ 456.35
Affinity Network		1	
Allegiance	8	30	\$ 11,594.68
Amer-I-Net	1		
Amer.'s Tele-Net.	25	4	\$ 201.45
ATT	11869	1491	\$ 70,141.80
Broadview Net	5	9	
Bus. Disc. Plan		1	\$ 12.00
Choice One		7	\$ 270.86
CoinTel	1	1	
CORECOM	7	6	\$ 1,955.14
CTC	3	6	
e-LEC/Essex	9	20	\$ 552.78
Essential.com	69	122	\$ 8,350.43
Excel-Telco	4	11	\$ 178.70
EZ-Talk	4	3	

## MONTHLY CASES 2000

8/1/2001

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	TOTAL
<b>CABLE</b>														
Adelphia	1	3	2	16	14	10	6	8	6	11	10	1	7	88
Cablevision	15	6	6	5	9	10	1	8	6	4	10	3	7	83
Charlemont								1			1		1	2
Charter	2	11	17	5	6	4	3	5	2	8	11	4	7	78
Cox									1				1	1
Media One	79	70	41	51	59	78	84	51	64	63	83	66	66	789
RCN						2	1					4	2	7
Time Warner	1	2			2	1	2					1	2	9
<b>Cable Total</b>	<b>98</b>	<b>92</b>	<b>66</b>	<b>77</b>	<b>90</b>	<b>105</b>	<b>97</b>	<b>73</b>	<b>79</b>	<b>86</b>	<b>113</b>	<b>79</b>	<b>88</b>	<b>1057</b>
<b>ELECTRIC</b>														
BE	31	32	20	23	32	106	72	63	59	66	53	31	49	588
CAMB	1		1		1		1				1		1	5
CE	15	9	14	16	31	15	14	26	16	26	25	38	20	245
EE	6	9	11	5	8	7	5	8	4	1	1		6	65
ME	27	42	34	48	53	105	89	78	83	85	72	37	63	753
NE						0				1			1	1
WME	11	12	23	21	27	23	22	24	25	24	13	7	19	232
MUN ELE	5		3	12	11	8	3	12	4	8	1	4	6	71
<b>Electric Total</b>	<b>96</b>	<b>104</b>	<b>106</b>	<b>125</b>	<b>163</b>	<b>264</b>	<b>206</b>	<b>211</b>	<b>191</b>	<b>211</b>	<b>166</b>	<b>117</b>	<b>163</b>	<b>1960</b>
<b>GAS</b>														
BSG	68	81	60	32	56	70	60	40	41	27	26	18	48	579
BKG	3	1	5	6	2	6	1	4	7	3	3	4	4	45
BLG			1		1								1	2
BG	21	20	27	33	41	27	36	31	52	43	27	27	32	385
CGC	4	2	7	7	8	14	4	5	8	7	9	5	7	80
CGL	4	5	2	3	2	3	2	1	5	1		4	3	32
CG	10	17	10	9	22	17	20	15	10	13	15	9	14	167
ECG	2	2		2	4	6	1	2	1	6	2	2	3	30
FRG	3	3	6	5	8	11	1	5	6	13	6	7	6	74
FGB		4	2	9	10	10	8	2	7	7	2	2	6	63
MUN GAS				2		1	1		2		2		2	8
NAG				1									1	1
OTG		1	1			1	1				1	1	1	6
<b>Gas Total</b>	<b>115</b>	<b>136</b>	<b>121</b>	<b>109</b>	<b>154</b>	<b>166</b>	<b>135</b>	<b>105</b>	<b>139</b>	<b>120</b>	<b>93</b>	<b>79</b>	<b>123</b>	<b>1472</b>
<b>WATER</b>														
WATER		3	1		3	3					2	3	3	15
<b>Water Total</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>15</b>
<b>OTHER</b>														
OTHER	3	5	3	3	4	1	3	1	6	3		7	4	39
<b>Other Total</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>39</b>
<b>SUPPLIERS</b>														
SUPPLIERS	5	3	6	8	6	6	1	4	5	6	1	2	4	53
<b>Supp. Total</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>53</b>

## MONTHLY CASES 1999

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	MO. AVG.	TOTAL
<b>CABLE</b>														
Adelphia	1	1			2	1	2		1	1	3	2	2	14
Avalon	1	4	1	1	4	3	1	6	2	2			3	25
Cablevision	18	23	10	11	19	11	10	19	9	16	5	16	14	167
Century			1				1						1	2
Charter		1	2				1	1	1	2	2	11	3	21
Cox	1	1			1	2	1					1	1	6
CVI-Time Warner	1													2
FrontierVision	2	1	5	1	3	5	2	7	3	2			3	31
Greater Media	1	5	4	6	4	4	2	3	1	1			3	31
Harron							1		1				1	2
Media One	50	43	37	28	28	43	32	34	53	53	53	114	47	568
RCN	1	2			1			1	2	1	2		1	10
Time Warner	10	5	9	3	5	7	3	2	4				5	48
Cable Total	86	86	69	50	67	76	56	73	77	78	65	144	77	927
<b>ELECTRIC</b>														
BE	33	25	60	73	67	53	59	57	58	73	50	28	53	636
CAMB	1	1					1	1				2	1	6
CE	14	13	25	38	34	24	31	30	27	24	20	9	24	289
EE	3	2	6	14	13	6	7	7	12	9	6	4	8	91
ME	36	42	60	74	71	63	82	90	75	63	52	44	63	752
NE					1		1	1					1	3
WME	12	17	13	36	40	34	23	23	24	28	18	18	24	288
MUN ELE	9	12	6	15	18	8	3	6	4	7		2	8	90
Electric Total	108	112	170	250	246	188	209	215	200	204	146	107	180	2155
<b>GAS</b>														
BSG	37	49	27	42	49	46	21	21	27	37	35	83	40	474
BKG	3	10	3	4	4	7	7	7	10	13	3	3	6	76
BLG				1									1	1
BG	22	28	36	37	31	27	39	26	33	34	27	24	31	366
CGC	5	10	11	9	9	4	3	4	3	2	4	1	5	65
CGL	2	6	3	9	7	4	2	4		6	5	3	5	51
CG	22	20	20	24	39	15	17	20	22	23	23	9	21	256
ECG		5	2	2		3		2	3		1	1	2	19
FCG														
FRG	5	3	6	6	12	7	3	7	6	8	8	1	6	72
FGE	3	6	3	12	9	7	3	3	13	8	2	7	7	78
MUN GAS	2			1	1	1		2	1	1			1	9
NAG			1			2							2	3
OTG	5	1	4	1				1			1		1	14
Gas Total	106	138	116	148	161	123	97	97	120	135	108	135	124	1484
<b>WATER</b>														
WATER	3		1	1	2	7	1	2	7	2	3	1	3	30
Water Total	3	0	1	1	2	7	1	2	7	2	3	1	3	30
<b>OTHER</b>														
OTHER	1	4	2	3	9	5	2	5	9	2	4	8	5	54
Other Total	1	4	2	3	9	5	2	5	9	2	4	8	5	54
<b>SUPPLIERS</b>														
SUPPLIERS	1	5	5	2	3	2	2	3	2	1	4	4	3	34
Supp. Total	1	5	5	2	3	2	2	3	2	1	4	4	3	34

# Crosstab Report - Consumer Database

DATE SPAN: 1/1/98 12/31/98										08/02/01	16:35	06174762591	MASS DTE CON DIV	0008/014		
BILL	CON	CRA	CRED	DENY	ESI	MFA	METER	MISC	PQ	QUAL	RATE	REF	RES	SCORE	SLAM	TOTAL
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	245
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1587
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1859
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	265
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	285
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
0	0	0	0	0	0											

# Crosstab Report - Consumer Database

01/01/1997 12/31/1997

08/02/01 16:34 6174782591

MASS DTE CON DIV

007/014

2

GAS	AMT	FEE	ADV	BILL	DOGS	COMM	GRAM	CREDIT	DELY	EST	INPA	METER	MISC	PD	DUAL	RATE	REF	REQ	REN	SCODE	BLAN	L.P.	TOTAL
BAYSTATE GAS	0	0	0	1	130	0	0	0	123	6	15	0	5	36	0	13	14	0	1	1	5	0	355
C	0	0	0	0	55	0	0	0	56	4	3	0	6	20	0	2	24	482	8	8	4	0	676
I	0	0	0	0	204	0	0	0	181	10	16	0	11	06	0	15	38	482	9	8	5	0	1031
BERKSHIRE GAS	0	0	0	0	14	0	0	0	23	3	1	0	0	2	0	1	1	0	1	0	0	0	46
C	0	0	0	0	6	0	0	0	8	1	0	0	1	5	0	1	0	84	7	2	0	0	113
I	0	0	0	0	20	0	0	0	28	4	1	0	1	7	0	2	1	84	8	2	0	0	159
BLACKSTONE GAS	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
I	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
BOSTON GAS	0	0	0	0	101	0	0	0	178	5	17	0	6	32	0	33	18	0	4	1	6	0	482
C	0	0	0	0	75	0	0	0	180	2	1	0	10	35	0	8	80	880	16	14	17	0	1393
I	0	0	0	0	244	0	0	0	228	7	16	0	18	07	0	38	88	888	20	15	23	0	1875
COLONIAL GAS CAPE	0	0	0	0	20	0	0	0	32	3	7	0	3	30	0	7	5	0	0	0	1	0	88
C	0	0	0	0	16	0	0	0	9	1	2	0	8	4	0	1	3	154	3	1	1	0	263
I	0	0	0	0	38	0	0	0	41	4	8	0	11	14	0	8	8	184	3	1	2	0	261
COLONIAL GAS LOWELL	0	0	0	0	27	0	0	0	47	3	8	0	4	8	0	2	0	0	0	0	0	0	95
C	0	0	0	0	12	0	0	0	15	0	3	0	4	5	0	1	0	143	2	0	0	0	189
I	0	0	0	0	38	0	0	0	62	3	8	0	8	15	0	3	0	143	2	0	0	0	264
COMMONWEALTH GAS	0	0	0	0	60	0	0	0	89	6	3	0	3	11	0	8	3	0	7	0	2	0	183
C	0	0	0	0	32	0	0	0	73	0	3	0	4	28	0	2	6	1248	2	2	8	0	1410
I	0	0	0	0	92	0	0	0	162	8	6	0	7	40	0	11	11	1248	8	2	7	0	1693
ESSEX COUNTY GAS	0	0	0	0	24	0	0	0	20	0	3	0	3	2	0	3	3	0	4	0	0	0	48
C	0	0	0	0	10	0	0	0	15	0	0	0	1	4	0	0	3	173	7	0	1	0	214
I	0	0	0	0	34	0	0	0	36	0	3	0	4	6	0	3	6	173	11	0	1	0	276
FALL RIVER GAS	0	0	0	0	7	0	0	0	37	1	1	0	0	3	0	3	1	1	2	0	0	0	88
C	0	0	0	0	4	0	0	0	19	0	1	0	1	0	1	0	1	94	2	0	0	0	123
I	0	0	0	0	11	0	0	0	56	1	2	0	1	3	1	3	2	95	4	0	0	0	179
FITCHBURG GAS & ELECTRIC	0	0	0	0	18	0	0	0	17	0	0	0	3	4	1	8	0	0	1	1	0	0	54
C	0	0	0	0	6	0	0	0	10	1	0	0	2	3	0	1	3	28	1	4	2	0	79
I	0	0	0	0	28	0	0	0	27	1	0	0	5	7	1	10	3	35	2	5	2	0	124
NORTH ATTLEBORO GAS	0	0	0	0	2	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	7
C	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	4
I	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	0	0	2	0	0	0	0	11
OTHER GAS CO.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
GAS	0	0	0	0	711	0	0	0	927	35	88	0	84	228	3	84	187	3381	68	34	45	0	1572



# Electric Company Complaint Rates

## Jan. - Dec. 1995

		C	20	14	41	71	376	199	13	17	0	59	18	0	15	0	843
Boston Edison		C	20	14	41	71	376	199	13	17	0	59	18	0	15	0	843
	1547	R	1	48	62	17	82	98	48	18	0	26	13	12	14	0	439
Cambridge		C	0	0	0	1	3	1	0	0	0	0	0	0	0	0	5
	42	R	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2
Commonwealth		C	5	24	26	7	83	152	10	9	0	2	8	0	2	0	328
	588	R	3	30	20	2	29	59	9	17	0	0	9	3	6	0	187
Eastern Edison		C	1	2	11	7	38	47	1	3	0	3	6	0	0	0	119
	364	R	0	4	8	0	12	27	3	1	0	4	0	1	0	0	60
Fitchburg		C	1	0	4	6	11	20	1	1	0	0	2	0	1	0	47
	15	R	0	0	4	1	5	12	1	2	0	0	1	0	0	0	26
Massachusetts		C	24	24	57	31	303	360	21	27	0	9	25	3	8	0	892
	5729	R	14	50	132	49	152	267	44	62	0	1	26	24	48	0	869
Nantucket		C	0	0	2	1	2	3	2	0	0	0	0	0	2	0	12
	31	R	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Western Mass.		C	8	9	22	24	90	173	2	9	0	8	5	0	11	0	361
	1810	R	1	12	12	7	24	49	4	14	0	3	2	3	5	0	136
TOTALS		C	59	73	163	148	906	955	50	66	0	81	64	3	39	0	2607
	10126	R	19	144	238	76	305	513	109	114	0	34	51	43	74	0	1720

C = CASES  
R = REFERRALS

# **Fitchburg Gas and Electric Light Company d/b/a Util**

## **Billing Adjustments - Electric Division: 1995 - 2005**

	2005	Average	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Electric	\$0.00	\$13.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$130.00	\$0.00	\$0.00	\$0.00
Residential Customers(1)	24,119	23,316	23,873	23,670	23,483	23,148	23,014	22,950	25,201	22,794	22,584	22,444
Per 1,000 Customers	\$0.00	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5.16	\$0.00	\$0.00	\$0.00

(1) Number of Residential Customers taken from FG&E FERC Form 1, page 304 for each year from 1994 - 2001 and represents the average number of residential customers. The figures for 2002 -2005 were obtained from FG&E's Monthly Accounting Report for the month of December for each year.



2003 CONSUMER BILLING ADJUSTMENTS		
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Adjustments *
ELECTRIC	FITCHBURG GAS & ELECTRIC	\$0.00
GAS	FITCHBURG GAS & ELECTRIC	\$1,483.55

2004 CONSUMER BILLING ADJUSTMENTS		
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Adjustments *
ELECTRIC	FITCHBURG GAS & ELECTRIC	\$0.00
GAS	FITCHBURG GAS & ELECTRIC	\$36.81

2005 CONSUMER BILLING ADJUSTMENTS		
INDUSTRYDESCRIPTION	COMPANY DESCRIPTION	Adjustments *
ELECTRIC	FITCHBURG GAS & ELECTRIC	\$0.00
GAS	FITCHBURG GAS & ELECTRIC	\$390.00

\* Data obtained and summarized from the MDTE "Monthly Summary Adjustments by Coordinator Detail" reports.

2002

INDUSTRYDESCRIPTION	COMPANY_DESCRIPTION	Adjustments
ELECTRIC	BOSTON EDISON	\$111,271.23
	CAMBRIDGE ELECTRIC	\$0.00
	COMELECTRIC	\$21,751.43
	MASSACHUSETTS ELECTRIC	\$38,271.42
	NANTUCKET ELECTRIC	\$0.00
	WESTERN MASS ELECTRIC	\$1,879.30
GAS	BAYSTATE GAS	\$37,329.00
	BERKSHIRE GAS	\$0.00
	BLACKSTONE GAS	\$0.00
	BOSTON GAS	\$9,490.81
	COLONIAL GAS CAPE	\$20,749.52
	COLONIAL GAS LOWELL	\$6,133.43
	COMMONWEALTH GAS	\$1,806.98
	ESSEX COUNTY GAS	\$300.00
	FALL RIVER GAS	\$1.66
	FITCHBURG GAS & ELECTRIC	\$673.09

Note: Data extracted from MDTE file.

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Total
ATT BB	0.00	1239.17	1,193.19	1,143.18	129.23	893.63	1,096.02	1,787.85	1,623.52	5,143.39	3,435.56	5,980.33	\$1,972.09	23,665.97
Adelphia	81.50	441.89	0.00	13.45	888.87	70.00	0.00	234.40	551.51	0.00	0.00	0.00	\$190.14	2,281.62
CableVision	0.00	0	0.00	0.00	208.00	0.00	70.00	0.00	0.00	0.00	0.00	0.00	\$23.17	278.00
Charter	0.00	0	0.00	11.29	0.00	0.00	121.75	113.77	0.00	0.00	15.07	156.22	\$34.84	418.10
RCN Cable	130.59	0	0.00	0.00	0.00	0.00	298.25	0.00	0.00	0.00	239.70	0.00	\$55.71	668.54
Total	212.09	1,681.06	1,193.19	1,167.92	1,226.10	963.63	1,586.02	2,136.02	2,175.03	5,143.39	3,690.33	6,136.58	\$2,278.94	27,311.33
BE	9,590.30	1389.87	2,550.55	1,066.59	6,877.49	4,414.22	4,459.43	10,535.52	1,827.25	5,396.06	4,377.63	17,616.56	\$5,841.79	78,181.47
CE	0.00	0.00	691.17	514.32	0.00	459.22	157.14	110.00	0.00	118.86	22.66	391.43	\$205.40	2,464.08
EE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	0.00
FOB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	0.00
ME	1,034.95	3,202.26	796.22	477.60	1,517.60	14,580.01	1,514.77	9,083.49	7,970.71	1,048.72	1,770.47	1,755.83	\$3,729.35	44,752.63
WME	262.44	1,357.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	218.66	0.00	0.00	\$236.51	2,598.10
Mun. Elec.	102.34	352.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	246.00	128.62	534.05	\$113.65	1,363.79
Total	10,990.03	6,301.91	4,037.94	2,058.51	8,395.09	19,453.45	6,131.34	19,729.01	10,797.96	7,028.30	6,299.38	20,297.87	\$10,126.73	121,528.79
BG	2,348.37	0.00	0.00	1,345.95	463.56	153.47	3,038.58	2,188.80	713.05	2,241.62	114.96	990.27	\$1,133.22	13,998.63
BKG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	0.00
BSG	2,006.61	4,146.53	5,760.85	6,791.38	7,439.42	11,728.97	758.45	5,670.31	3,407.50	3,745.30	0.00	3,063.14	\$4,943.22	54,518.66
CG	144.02	0.00	521.74	364.11	0.00	0.00	998.14	0.00	135.60	0.00	0.00	40.42	\$183.67	2,304.83
COC	0	638.56	0.00	621.66	746.51	3,548.16	45.00	566.79	424.40	1,452.32	574.82	1,726.42	\$862.05	10,344.64
CGL	1,296.35	0.00	0.00	0.00	0.00	1,104.29	0.00	681.03	573.22	1,115.31	289.01	0.00	\$421.60	5,889.31
ECG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	0.00
FRG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.25	0.00	0.00	0.00	0.00	\$48.60	583.25
NAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.05	0.00	0.00	\$0.75	9.05
Mun. Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	0.00
Total	5,795.35	4,785.89	6,282.89	9,123.30	8,649.49	16,534.89	4,848.17	9,690.18	5,253.77	8,563.68	978.79	5,828.25	\$7,193.12	86,317.47
Serv-Sense	83.55	0.00	26.56	0.00	0.00	97.41	0.00	0.00	0.00	0.00	0.00	0.00	\$17.29	287.52
TOTAL	83.55	0.00	26.56	0.00	0.00	97.41	0.00	0.00	0.00	0.00	0.00	0.00	\$17.29	287.52
WATER**	752.87	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$77.74	932.87
TOTAL	752.87	0.00	180.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$77.74	932.87
Adelphia Tel.	180.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$15.83	180.40
Advantage	0.00	0.00	0.00	0.00	0.00	456.35	0.00	0.00	0.00	0.00	0.00	0.00	\$38.03	456.35
Alliance	0.00	967.97	5,029.73	240.69	0.00	1,638.28	0.00	2,849.32	608.69	0.00	260.00	0.00	\$966.22	11,594.68
AmerTelNet	201.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$16.79	201.45
ATT	6,861.03	13,353.83	4,998.30	2,036.80	6,468.88	5,712.12	4,885.07	5,340.27	5,856.87	3,076.74	7,383.03	3,124.34	\$5,758.11	69,097.28
Bus. Disc. Plan	0.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1.00	12.00
Choice One	0.00	0.00	0.00	0.00	0.00	0.00	0.00	270.86	0.00	0.00	0.00	0.00	\$22.57	270.86
Corcom	1,709.00	246.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$162.93	1,951.14
eLEC	0.00	78.05	0.00	204.94	121.33	0.00	0.00	0.00	101.31	13.19	0.00	33.96	\$46.07	582.78
Essential.com	280.79	72.04	10.00	1,572.90	1,149.27	542.40	9.24	2,484.58	0.00	351.21	0.00	1,878.00	\$695.87	8,380.43
Excel-Telco	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.70	0.00	0.00	0.00	0.00	\$14.89	178.70
Fairpoint Comm.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,605.00	0.00	0.00	\$133.75	1,605.00
Fed Trans Tel	0.00	0.00	299.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	185.55	\$40.42	485.05
Global Cross	13.65	0.00	0.00	0.00	0.00	27.77	0.00	0.00	0.00	0.00	0.00	0.00	\$3.45	41.42
Hold Billing	0.00	158.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$13.21	158.57
IDT	0.00	39.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$3.29	39.47
ILD	11.28	0.00	2.15	52.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$5.52	66.23
IntegreTel	0.00	52.65	74.79	0.00	0.00	47.58	0.00	0.00	0.00	0.00	0.00	11.85	\$15.57	186.87
LightYear	0.00	0.00	0.00	0.00	0.00	0.00	0.00	203.13	0.00	0.00	0.00	0.00	\$16.93	203.13
Matrix	219.81	0.00	91.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$25.92	311.04
MCI	6,188.71	820.03	432.06	1,931.22	468.43	1,158.50	1,117.29	3,095.28	249.76	799.76	458.65	2,107.28	\$1,568.91	18,826.97
MediaOne Tel	257.59	503.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	\$65.09	781.08
Network Access	478.62	0.00	0.00	0.00	0.00	0.00	0.00	13.76	284.21	0.00	0.00	340.00	\$93.05	1,116.59
Network+	2,106.23	0.00	352.88	3,917.95	2,628.53	402.23	5,617.25	4,699.62	5,071.02	603.80	1,043.77	137.76	\$2,215.25	26,583.04
OLS	15.98	0.00	92.16	0.00	0.00	0.00	0.00	18.70	56.36	394.00	47.43	295.45	\$76.67	920.08
OneStar	0.00	0.00	0.00	0.00	0.00	0.00	83.23	0.00	0.00	0.00	0.00	0.00	\$6.94	83.23
OTT	446.53	0.00	135.13	0.00	0.00	0.00	12.96	24.67	0.00	0.00	34.00	496.87	\$95.85	1,198.16
Plan B	125.93	90.35	99.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$26.35	316.23
Qwest	85.98	40.00	15.72	0.00	170.27	73.20	0.00	142.63	0.00	157.26	196.23	19.56	\$78.07	908.85
RCN	782.03	915.85	729.51	1,085.99	379.76	871.54	301.27	336.18	491.61	652.49	847.15	860.13	\$687.79	8,253.51
Richmond	0.00	0.00	7.10	0.00	0.00	0.00	0.00	98.00	0.00	0.00	0.00	0.00	\$8.76	105.10
RSL.COM USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.67	0.00	\$4.97	59.67
SBC Telecom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.36	0.00	0.00	0.00	\$4.70	56.36
Serv-Sense	0.00	0.00	0.00	0.00	0.00	66.51	0.00	0.00	0.00	0.00	0.00	0.00	\$5.54	66.51
Sprint	430.99	2,825.38	571.61	244.59	25.00	221.08	752.92	2,852.56	1,758.16	1,214.09	118.75	320.69	\$944.65	11,335.82
Talk.com-AOL	22.16	52.48	0.00	0.00	2,118.09	109.95	0.00	233.49	3,495.38	545.18	114.56	0.00	\$557.61	6,691.29
USBI	44.13	0.00	0.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	130.71	0.00	\$14.95	179.44
USP&C	0.00	0.00	0.00	0.00	27.00	500.00	0.00	0.00	27.00	1,150.00	324.00	0.00	\$169.00	2,008.00
VarTec	0.59	0.00	0.00	0.00	0.00	4.81	0.00	0.00	0.00	0.00	2.50	0.00	\$0.66	7.90
Verizon	0.00	1,117.00	1,530.68	252.64	3,972.48	627.14	6,901.74	2,760.97	1,954.57	996.32	1,316.34	3,106.94	\$2,044.74	24,536.82
WebNet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.89	10.95	0.00	214.46	92.91	\$27.68	332.31
WorldCom Net	0.00	155.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$12.94	155.31
Zero+	4.88	0.00	0.00	15.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$1.71	22.24
Ztel	281.37	1,080.13	2,279.68	189.04	569.67	70.43	931.23	1,246.76	103.55	0.00	163.95	0.00	\$609.89	7,938.53
Total	20,281.89	22,568.76	16,743.18	11,761.81	17,529.04	12,529.89	20,602.20	26,863.37	20,125.68	11,559.04	12,568.49	13,162.00	\$17,192.94	208,383.78
TOTAL	37,279.36	35,336.82	28,463.46	24,111.54	35,799.72	49,579.27	33,199.73	58,418.58	38,352.36	32,294.33	23,556.99	45,416.67	\$36,814.87	444,673.76

# Annual Statistics 2001

Company	Inquiries	Cases	Adjustments
Adelphia	133	97	\$ 1,730.11
ATT BB	8045	1659	\$ 22,919.00
Media One			\$ 1,538.00
Avalon	1		
CableVision	93	17	\$ 278.00
Century	63	2	
Charlemont	56	1	
Charter	1421	77	\$ 418.10
Cox		1	
CVI-TWC	4		
Greater Media	11		
Inland	1		
RCNC	12	11	\$ 668.54
Shrewsbury	4		
Time Warner		6	
<b>Cable Total</b>	<b>9844</b>	<b>1871</b>	<b>\$ 27,552.76</b>
BE	2599	1342	\$ 65,008.72
CAMB	6	2	
CE	249	301	\$ 2,482.03
EE	10		
ME	4123	1154	\$ 44,583.08
NE	1	2	
WME	590	227	\$ 2,838.10
MUN ELEC	224	96	\$ 1,363.79
<b>Electric total</b>	<b>7802</b>	<b>3124</b>	<b>\$ 116,275.72</b>
<b>SUPPLIERS</b>			
SUPPLIERS	88	59	\$ 218.82
<b>Suppliers Total</b>	<b>88</b>	<b>59</b>	<b>\$ 218.82</b>
BSG	563	307	\$ 54,122.39
BKG	68	21	

Post-It® brand fax transmittal memo 7671 1 of pages

To: Mark Lambert

From: Karen Robinson

Re: DE Pensacola Dr.

Dept. 617 305-3631

Fax: 403 227-4664

## Annual Statistics 2001

<b>BLG</b>	<b>2</b>	<b>2</b>	
<b>BG</b>	<b>1751</b>	<b>376</b>	<b>\$ 10,555.22</b>
<b>CGC</b>	<b>108</b>	<b>112</b>	<b>\$ 12,086.80</b>
<b>CGL</b>	<b>33</b>	<b>39</b>	<b>\$ 6,360.46</b>
<b>CG</b>	<b>110</b>	<b>161</b>	<b>\$ 2,204.03</b>
<b>ECG</b>	<b>16</b>	<b>23</b>	
<b>FRG</b>	<b>93</b>	<b>50</b>	<b>\$ 583.25</b>
<b>FGE</b>	<b>51</b>	<b>68</b>	
<b>NAG</b>	<b>1</b>	<b>3</b>	<b>\$ 85,921.20</b>
<b>OTG</b>	<b>16</b>	<b>5</b>	
<b>MUN GAS</b>	<b>9</b>	<b>5</b>	
<b>Gas Total</b>	<b>2258</b>	<b>1172</b>	<b>\$ 85,921.20</b>
<b>WATER</b>	<b>77</b>	<b>29</b>	<b>\$ 1,113.27</b>
<b>Water Total</b>	<b>77</b>	<b>29</b>	<b>\$ 1,113.27</b>
<b>Company</b>	<b>TOTAL</b>		
<b>Adelphia</b>		<b>2</b>	
<b>Advantage Tele.</b>	<b>1</b>	<b>1</b>	<b>\$ 456.35</b>
<b>Affinity Network</b>		<b>1</b>	
<b>Allegiance</b>	<b>8</b>	<b>30</b>	<b>\$ 11,594.68</b>
<b>Amer-I-Net</b>	<b>1</b>		
<b>Amer.'s Tele-Net.</b>	<b>25</b>	<b>4</b>	<b>\$ 201.45</b>
<b>ATT</b>	<b>11869</b>	<b>1491</b>	<b>\$ 70,141.80</b>
<b>Broadview Net</b>	<b>5</b>	<b>9</b>	
<b>Bus. Disc. Plan</b>		<b>1</b>	<b>\$ 12.00</b>
<b>Choice One</b>		<b>7</b>	<b>\$ 270.86</b>
<b>CoinTel</b>	<b>1</b>	<b>1</b>	
<b>CORECOM</b>	<b>7</b>	<b>6</b>	<b>\$ 1,955.14</b>
<b>CTC</b>	<b>3</b>	<b>6</b>	
<b>e-LEC/Essex</b>	<b>9</b>	<b>20</b>	<b>\$ 552.78</b>
<b>Essential.com</b>	<b>69</b>	<b>122</b>	<b>\$ 8,350.43</b>
<b>Excel-Telco</b>	<b>4</b>	<b>11</b>	<b>\$ 178.70</b>
<b>EZ-Talk</b>	<b>4</b>	<b>3</b>	

CONSUMER DIVISION ADJUSTMENTS - 2000

005/007

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOT
Acadphila				4.00	50.00	145.68			80.77		82.92		36.7
Cablevision			74.94		1.01	6.79	3.59			494.13	214.00	22.37	810
Charter		29.95	18.55	221.13	350.00						37.90		657
Cox													3
Media One	599.37	130.01	509.77	370.62	1,139.98	734.62	1,506.50		806.45	511.23	1,820.78	492.13	9,559
RCN Cable						134.29	90.45				201.90		426
Total	599.37	159.96	603.26	595.75	1,540.99	1,021.38	1,680.54		887.22	1,005.36	2,357.50	514.50	12,254

BE	8,296.72	4773.36	3,356.44	946.22	928.46	603.34	4,154.79	14,900.04	6,184.04	24,257.99	2,939.97	1,551.67	72,893
CAMB													0
CE	6.00									2.66		25.00	33
PE		366.05	407.45	565.52	11.43		215.00	710.57	1,268.68			256.99	3,801
FGE													0
ME	695.83	1,911.55	13,017.21		1,406.48	11,344.34	3,081.90	1,993.85	457.28	1,282.05		504.00	35,694
NE													0
WME			624.48		155.30		326.71		520.00	341.35	129.91	1,041.36	3,139
Mun. Elec.				42.38	26.25								68
Total	8,998.55	7,050.96	17,405.58	1,554.12	2,527.92	11,947.68	7,778.40	17,604.46	8,430.00	25,884.05	3,069.88	3,379.02	115,630

BG	137.76	2,203.10	62.31	2,864.30	487.15	1,743.10	2,137.18	232.87	767.95	588.83	61.22		11,285
BKG		877.72		33.97								256.08	1,877
BGG	337.69	2,990.51	2,717.73	5,303.69	4,478.33	7,879.00	1,849.70	10,697.97	2,778.87	8,662.38	1,400.00	7,037.46	56,133
CG		132.31	422.25	47.00		60.66	157.29	164.09					983
CGC			181.21	350.00	716.89	386.81	128.63		949.49	403.76	915.23	846.86	4,878
COL	591.79	552.88		1,309.78	5.65	385.02			1,077.28				3,922
ECG		31.92		106.28			367.40		37,000.00	18.17			3,922
FGE													331
FRG		942.93	99.74			393.91				331.20	115.79		331
Mun. Gas					55.00					974.11			4,878
Total	1,067.24	7,731.37	3,483.24	10,015.02	5,743.02	10,848.50	4,640.20	11,094.93	42,573.59	10,978.45	2,492.24	8,140.40	118,808

AllEnergy										210.00			210
Servi-Sense				46.72	214.17			47.06	89.95	153.80			551
Utility.com										25.00			25
TOTAL				46.72	214.17			47.06	89.95	388.80			786

3R**		70.00				1,387.47			123.43				1,580.5
L		70.00				1,387.47			123.43				1,580.5

Age			57.06										57.0
ince	439.80												3,385.7
TeleNet				190.25	259.92	577.11	908.37	1,069.19			390.59		941.6
elNet		93.76		33.95			399.08		92.35				127.5
ATL	5,766.40	8,463.17	15,941.22	17,204.68	19,246.15	12,999.69	13,220.61	43,822.86	9,699.48	14,333.39	19,418.80	17,101.56	197,218.0
	1,543.52	1,265.08	1,592.96	2,566.05	8,880.71	4,070.37	4,171.84	5,607.81	11,450.44	4,340.76	1,001.82	10,000.00	10,000.00

1999

Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avallon		7.90	29.95		40.80		2.27		12.00			
Cablevision	244.83	176.07	168.11	35.83	206.04	43.19	56.89		24.18	33.03		162.81
Century			59.28								135.00	
Charter								21.95		19.95		
CVI Cable	44.01								35.00			
Frontier/Vision							29.23					
Greater Media			25.00	151.99			27.95	56.80				
Media One	226.07	410.11	28.65	197.55	523.25	543.95	36.52	154.94	284.01	537.39	126.38	635.53
RCN Cable			304.62									
Time Warner	141.08			97.16		82.49	100.00					
Total	655.99	594.88	615.61	482.53	770.09	669.63	252.86	233.69	355.19	598.37	261.38	798.34
BE	32,521.05	1577.34	9,786.93	6,646.78	12,628.98	21,298.75	2,696.87	3,152.12	9,459.73	18,966.24	2,092.90	428.52
CAMB		132.29										
CE		251.69	501.99		938.88	1,215.58		363.52		61.27	50.00	
EE			82.79								14.36	
FGE												
ME	2,043.30	523.64	947.94	2,884.09	50.61	1,302.86	2,688.19	711.03	398.38	199.63	3,591.89	414.85
NE												
WME		1,410.64			4,546.71			806.08				
Mun. Elec.	18.42	572.85		259.51							28.68	
Total	34,582.77	4,468.45	11,319.65	9,790.38	18,165.18	23,856.74	12,407.64	5,032.75	9,858.11	19,227.14	5,777.83	843.37
BG	112.00	1,065.92	1,629.83	772.34	3,723.06	493.00		1,078.00	294.00	1,654.72	1,775.00	
BSG	25.00			428.55	559.20	100.00				3,090.54	1,802.52	
BSG	1,535.01	3,816.90	3,720.42	1,695.96	5,714.49	3,438.32	4,087.81	3,420.33	51.57	458.00	903.25	3,016.33
CG	869.30	597.98	2,421.44	550.20		914.79		159.11		154.00	826.93	147.00
CGC	78.67		1,290.11	204.00	200.06		25.00	315.60	200.00			59.80
CGL			590.52	119.33	295.24			178.34		860.54		
BCG			45.50		2,349.25							
FGE		172.55	358.16			430.00						960.71
PMG	2.50	212.25	262.98					25.80				
Mun. Gas			35.33									
Total	2,622.48	5,865.60	10,354.49	3,770.38	12,841.30	5,376.11	4,112.81	5,177.18	545.57	6,217.88	5,307.70	3,223.13
COM/Energ Mkt.			825.02									
AllEnergy								400.00				
Enron		463.00										
TOTAL		463.00	825.02					-400.00				
WATER**												
TOTAL		0.00										

[illegible]41



## Consumer Division Adjustments - 1997

AGE	13,597.16	1,768.05	19,115.58	7,358.14	7,567.26	11,217.69	6,211.53	17,353.43	13,681.27	23,209.75	16,786.46	9,312.51	147,597.23
CAMB	888.49		443.46		140.69	41.14	178.04	10,402.04	17.73	14,666.67		216.07	888.49
CE	147.60					741.56	8,976.95		150.00		400.36		36,283.76
DB		1,194.86		114.20									11,578.33
FER													0.00
MBE	754.22	1,642.09	410.00	1,474.33	1,257.76	553.07	598.49	1,480.75	1,344.72	213.35	428.34	1,058.40	10,484.34
NE	211.46		618.00										833.40
WHE	21.51	1,318.74							983.11	42.74	1,075.07	1,004.99	4,286.16
Man. Elec.													0.00
Total	15,622.48	5,333.65	21,283.38	9,448.16	8,689.45	12,533.86	15,963.04	25,946.34	16,013.13	43,132.86	11,488.13	11,681.77	282,374.92
SD	1,045.14	345.11	4,286.28	67.74	4,458.38	4,586.74	2,589.76	1,481.77	2,591.02	2,312.33	1,581.24	160.22	23,666.19
BLD		346.09	663.42	387.60									0.00
REG	434.83	827.03	1,205.50	745.23	1,166.94	539.33	1,011.53	711.48	9,434.22	1,056.37	6,531.10	987.82	25,233.37
CG			728.31	135.80	946.00		1,706.42	203.95		1,514.00			5,534.48
CDC				1,143.75		1,253.54					56.16		2,381.33
OSL	1,260.23	128.38	829.41		1,951.64	230.31	1,378.43		114.00	1,763.78	6,366.92	164.97	14,386.37
WATER**		110.25			79.19						122.00		0.00
ROAD								141.39					0.00
Man. Gas						333.42							323.43
Total	2,460.20	1,756.77	7,075.92	2,401.32	8,603.32	6,815.74	8,206.43	2,317.20	12,139.24	6,469.03	14,807.62	1,578.89	78,418.68
WATER**							106.00				78.19		184.19
Total							106.00				78.19		184.19
AFT	1,274.34	250.06	68.20	159.59		7,609.03	2,023.33	506.34	151.20	5.61		7,333.11	19,481.41
ADB													0.00
DTT										108.00			386.80
LDC								30.44					30.44
BCH	615.44		104.48	53.35			286.48		537.28			1,048.73	2,146.87
NYR&K	1,275.94	387.94	1,436.16	1,634.67	2,746.57	2,743.39	1,363.01	271.40	2,088.08	1,486.15	644.70	5,564.96	21,584.41
OTT				280.57	583.99	194.31	283.41	13.00		366.38	406.79	102.04	2,075.29
PL&M*	125.00												135.00
ECN													135.00
SPR	20.31							22.00				181.37	194.09
Total	3,311.07	638.00	1,798.34	1,877.28	3,312.56	10,318.13	3,077.23	835.08	2,306.97	1,910.05	1,725.01	14,140.21	46,284.43
TOTAL	21,691.35	7,918.42	30,728.14	13,726.96	38,574.33	19,897.71	21,211.67	27,108.52	38,950.04	51,692.84	34,528.93	27,181.87	343,316.27

CONSUMER/REPORTS/ADJSTG/ADJOLD/ADJSTG97ADJSTG97

## CONSUMER DIVISION ADJUSTMENTS - 1996

BB	5,074.02	10,519.72	4,632.59	2,911.71	19,794.07	3,508.17	6,100.87	22,596.65	10,297.40	1,437.79	1,839.88	7,978.90	96,691.77
CAMB											414.22		414.22
CE											1,035.32	743.50	4,118.52
EE	275.02	1,449.27	751.19	323.49	224.63	402.10	99.01	411.04	583.41		18.05	647.24	5,469.58
FGE													0.00
ME	403.24	1,043.24	1,843.11	1,329.11	2,221.15	186.40	2,179.38	789.98	642.82	1,512.84		148.82	12,308.29
NE	1,407.15												1,407.15
WMB	204.42	3,882.33	747.85	1,517.67	83.46	2,322.59	2,072.03	255.41	4,584.36		467.56	919.00	17,056.68
Mun. Elec.							675.86						675.86
Total	7,363.85	18,151.65	9,203.16	6,081.98	22,323.31	6,419.26	11,127.35	24,053.08	16,107.99	3,089.67	3,775.23	10,437.46	138,133.99

BG	3,082.73	4,664.56	8,216.10	3,024.94	7,297.43	1,824.14	4,821.40	1,302.11	1,051.67	5,641.17	3,951.62	5,477.38	50,355.25
BKG					250.00	219.15	215.00						684.15
BLG													0.00
BSS	568.97		1,205.69	3,455.42	395.38	1,622.68		169.00	305.00	258.71	218.53	50.00	8,249.38
CO	575.30	93.92	135.01	163.50	78.96			40.51	1,429.85				2,517.85
COC								182.13					1,974.81
CGL	1,571.62	663.38	7,964.99	401.09	3,211.45	345.12	717.12		152.14	480.54	670.01	219.44	16,396.90
ECG	26.30	181.10	1,302.94	102.56	182.96	102.51			720.00			96.04	1,994.41
FRG		62.80			515.69		57.25		102.80				1,355.74
NAG													102.80
Mun. Gas													0.00
Total	5,824.92	5,761.38	18,894.73	8,376.22	12,016.87	4,426.15	5,810.77	1,693.75	3,761.46	6,380.42	4,840.16	5,842.86	83,628.69

WATER**													3,456.00	3,456.00
Total													3,456.00	3,456.00
ATT	37.50	218.38	696.71		315.00	594.45	63.84	121.97	458.57				2,506.42	0.00
AOS													0.00	0.00
COCOT													0.00	0.00
INF													177.63	0.00
INT	45.81	131.82											773.79	0.00
ITI													6,608.51	0.00
LDC				6.47	696.84			70.48		546.01	628.88		850.83	30,418.72
MCI	1,690.67	408.15		954.88	1,056.05	692.00	97.79		526.08	905.36	432.23		62.64	2,163.74
NYNEX	2,361.01	7,114.29	3,991.95	4,518.26	1,180.57	4,899.33	1,796.11	1,535.33	833.45	904.88			375.72	248.89
OTT	154.37		32.53	223.37	9.72	246.19	195.90	50.54	284.00	127.72			116.06	
PLGRIM						252.00								
SPR					237.96				2.93					
ZERO+	69.75		46.31											
Total	4,359.11	7,872.64	4,767.50	5,702.98	3,496.14	6,683.97	2,153.24	1,778.32	2,232.75	2,356.25	1,061.11	913.47	43,377.48	
TOTAL	17,547.88	31,785.67	32,865.39	28,161.18	37,836.32	17,529.38	19,091.36	27,525.15	22,182.20	11,826.34	9,676.59	28,649.79	268,597.16	

## CONSUMER DIVISION ADJUSTMENTS - 1995

BE	3,957.84	5,043.08	20,937.03	2,254.89	14,325.40	11,434.76	7,929.21	22,327.41	18,766.96	41,263.98	30,729.30	16,165.89	195,135.79
CAMB			821.01										821.01
CE	1,507.84	403.75	255.65	41.35	960.21	398.93		18.84		1,620.55			5,207.12
EE	263.31		238.28		45.98		289.15	2,523.64	101.10		166.75	160.61	3,788.82
FOE													0.00
ME	7,805.99	1,478.29	175.13	1,122.46	2,397.03	3,544.29	696.07	977.16	1,664.87	1,305.18	2,010.90	2,743.90	25,921.27
NE													0.00
WME	933.78	319.10	328.00	226.88		151.03	662.38	859.37	435.44	1,558.95	1,285.31	41.20	6,801.44

BG	2,186.27	3,068.88	4,635.04	13,664.51	20,299.13	7,588.87	1,066.82	3,734.09	3,667.79	9,683.54	4,543.19	701.46	74,799.59
BKG			0.66		1,400.47	6,206.36				101.55			7,769.04
BLG													0.00
BSG	950.62	1,599.64	1,126.05	2,001.55	1,939.47	2,621.70	1,250.53	1,349.03	66.00	241.37	1,864.93	1,199.36	16,170.25
CG	1,312.88	540.86	50.00	183.90	387.09	111.33	653.13	63.95	286.69	164.00	4,966.79		8,720.22
CGC	35.00	144.00	18.19	300.00	300.00	233.66	308.60	60.00	413.79	182.00			1,695.24
CGL	697.78			1,176.31	1,165.25	460.51	25.00	104.42	1,538.46	1,515.11		167.78	6,850.62
ECG		169.23		124.25		288.85							582.33
HOG								426.13					426.13
FRG	25.00			318.97			32.00			325.09			781.06

MUNI +			1,074.44	32.67			480.52		1,104.37	3,132.06			5,824.06
WATER**	59.20							80.00		161.02			300.22
ATT	1,784.72	531.05	875.93	1,905.95	1,291.65	1,912.63	582.13	1,293.38	1,120.39	40.20	356.06	991.64	12,685.73
AOS		19.51				47.89		17.59			480.08		565.87
COCOT							0.75						0.75
INF							63.19						63.19
INT							449.49			181.63	93.60	162.00	886.72
ITI		8.00											8.00
LDC		1.11	123.89	2,146.06	15.96	51.71			168.32	129.60		141.54	2,778.19
MCI		3,764.76	146.56	405.94			534.45	2,186.05	42.85	1,451.22	251.49	373.56	9,158.88
NYNEX	19,126.63	3,916.25	2,411.80	948.99	876.03	593.23	5,325.20	3,891.11	6,206.66	6,121.82	2,162.79	1,194.88	29,632.51
OTT	910.94	442.79	54.96		60.39	270.15		924.07	603.30	1,224.00	209.28	122.90	4,822.78
SPR					47.39		3.00	117.24					167.63
ZERO +								12.90				15.77	28.67
TOTAL	41,557.80	21,410.30	33,272.62	26,454.28	45,471.45	36,363.39	19,902.13	49,956.38	36,186.99	70,404.87	49,120.47	24,182.49	622,252.29

\*Muni = March - West Boylston  
 April - South Hadley  
 July - Merrimac  
 Sept. - North Attleboro  
 Oct. - Chicopee = 296.50  
 - Norwood = 39.68  
 - Reading = 2,714.88  
 - Taunton = 108.00

\*\*Water = Jan. - Mass. American Water  
 August - Barnstable Water Supply  
 Oct. - Mass. American Water

OCT. Adj for BECO - \$7.66 Layon case

# Fitchburg Gas and Electric Light Company d/b/a Unitil

## SAIFI & SAIDI: 1996-2005

Year	SAIDI by Year (min.)	SAIFI by Year	SAIDI by Year (min.)	SAIFI by Year
2005	134.16	1.947	120.66	1.705
2004	237.84	2.528	106.53	1.231
2003	208.32	2.617	141.63	1.810
2002	239.54	2.532	191.37	2.186
2001	155.67	2.064	140.35	1.596
2000	325.44	2.423	116.56	1.362
1999	263.97	3.161	160.88	2.003
1998	186.16	1.904	116.09	1.341
1997	202.12	2.878	139.45	1.896
1996	1,125.24	3.596	124.70	1.782

<sup>1</sup> Includes all reliability data for 1996-2005.

<sup>2</sup> Equals TOTALS minus D. T. E. assumptions for calculating electric reliability measures.

# Fitchburg Gas and Electric Light Company

## Lost Work Time Accident Rate: 1995 - 2005

$$\text{Incident Rate} = (N/EH) \times 200,000$$

where,

**N** = number of lost work time injuries and illnesses, including cases involving days away from work or days of restricted work activity or both  
**EH** = total hours worked by all employees during the calendar year  
**200000** = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

Year	Number of Hours Worked by All FG&E Employees	Number of Lost Time Accidents(1)	Lost Time Incident Rate
2005	170,398	4	4.69
2004	180,892	5	5.52
2003	182,010	2	2.20
2002	196,928	1	1.02
2001	191,108	7	7.33
2000	188,108	7	7.44
1999	190,823	7	7.34
1998	202,883	12	11.83
1997	222,057	11	9.91
1996	243,074	17	13.99
1995	250,451	16	12.78

(1) Lost time accidents are for both FG&E's electric and gas divisions.

# Fitchburg Gas and Electric Light Company d/b/a Unitil

## Staffing Levels: 1997 – 2005

<u>Year</u>	<u>Staffing Level<sup>1</sup></u>
2005	83
2004	85
2003	87
2002	86
2001	85
2000	83
1999	83
1998	83
1997	102

G.L. c. 164 requires present staffing levels of a distribution company to be tied to a company's November 1, 1997 levels only when it operates under a performance-based rate ("PBR") plan. As the Department recognized in D.T.E. 05-21 (Letter Order issued December 30, 2005), FG&E is not subject to either a PBR or a merger-related rate plan, and the company files its SQ reports for informational purposes only.<sup>2</sup> Accordingly, no staffing level benchmark for FG&E is required. However, the Department has determined that there is value in distribution companies reporting their staffing levels for informational purposes, as compared to November 1997, on an annual basis.

In November of 1997, FG&E had 102 employees. As of December 2005, FG&E has 83 employees. The reduction is predominantly the result of two separate reassignments of FG&E employees to Unitil Service Corp. First, as FG&E discussed in its recent rate proceedings, in April of 1998, all customer service center activities were centralized in Unitil's Concord, New Hampshire facility where, as a result of the consolidation, FG&E's customers now receive 24/7 customer assistance from live customer service representatives. In addition, a bilingual representative is available to communicate with FG&E's spanish-speaking customers. The centralization resulted in a shift of approximately 11 positions from FG&E to Unitil Service Corp. Second, in April of 1998, five FG&E engineering personnel were transferred to Unitil Service Corp.'s Engineering Department resulting in centralization of the system's engineering function, streamlining of operations, and improvements in service quality and reliability.

FG&E believes that since employees can be transferred between the Unitil system subsidiaries (with the work they perform continuing to inure to the benefit of FG&E), it is important to review staffing levels on a total system basis. See, accord, Joint Comments of Massachusetts Elec. Co., Nantucket Elec. Co. and Eastern Edison Co., D.T.E. 99-84 (Dec. 3, 1999).

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<sup>1</sup> For the period 1997 through 2001, staffing level refers to the number of employees on payroll at the end of the year. Commencing with 2002, staffing level refers to the number of staff positions which includes the number of employees on payroll plus open positions.

<sup>2</sup> The Department also noted in the Order that FG&E is not subject to penalties for failure to meet SQ benchmarks.

# Fitchburg Gas and Electric Light Company

## Restricted Work Day Rate: 2005

***Incident Rate =  $(N/EH) \times 200,000$***

***where,***

***N*** = number of cases of lost work time injuries and illnesses involving days of restricted work activity only

***EH*** = total hours worked by all employees during the calendar year

***200000*** = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

**Restricted Work Day Rate for 2005 = 1.17**

**N = 1**

**EH = 170,398**

Note: The Restricted Work Day Rate is a subset of, and is included within the Lost Work Time Accident Rate, in accordance with the Bureau of Labor Statistics definition. The Restricted Work Day Rate is for both FG&E's electric and gas divisions.

## **Fitchburg Gas and Electric Light Company d/b/a Unitil**

### **Restricted Work Day Rate: 2004**

***Incident Rate =  $(N/EH) \times 200,000$***

***where,***

***N*** = number of cases of lost work time injuries and illnesses involving days of restricted work activity only

***EH*** = total hours worked by all employees during the calendar year

***200000*** = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

**Restricted Work Day Rate for 2004 = 4.42**

**N = 4**

**EH = 180,892**

Note: The Restricted Work Day Rate is a subset of, and is included within the Lost Work Time Accident Rate, in accordance with the Bureau of Labor Statistics definition. The Restricted Work Day Rate is for both FG&E's electric and gas divisions.



## **Fitchburg Gas and Electric Light Company d/b/a Unitil**

### **Restricted Work Day Rate: 2003**

***Incident Rate = (N/EH) x 200,000***

***where,***

***N*** = number of cases of lost work time injuries and illnesses involving days  
of restricted work activity only

***EH*** = total hours worked by all employees during the calendar year

***200000*** =base for 100 equivalent full-time workers (working 40 hours per week,  
50 weeks per year).

**Restricted Work Day Rate for 2003 = 1.10**

**N = 1**

**EH = 182,010**

Note: The Restricted Work Day Rate is a subset of, and is included within the Lost Work Time Accident Rate, in accordance with the Bureau of Labor Statistics definition. The Restricted Work Day Rate is for both FG&E's electric and gas divisions.

## **Fitchburg Gas and Electric Light Company d/b/a Unitil**

### **Restricted Work Day Rate: 2002**

***Incident Rate = (N/EH) x 200,000***

***where,***

***N*** = number of cases of lost work time injuries and illnesses involving days of restricted work activity only

***EH*** = total hours worked by all employees during the calendar year

***200000*** = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

**Restricted Work Day Rate for 2002 = 0**

**N = 0**

**EH = 196,928**

Note: The Restricted Work Day Rate is a subset of, and is included within the Lost Work Time Accident Rate, in accordance with the Bureau of Labor Statistics definition. The Restricted Work Day Rate is for both FG&E's electric and gas divisions.

## **Fitchburg Gas and Electric Light Company d/b/a Unitil**

### **Restricted Work Day Rate: 2001**

***Incident Rate = (N/EH) x 200,000***

***where,***

***N*** = number of cases of lost work time injuries and illnesses involving days of restricted work activity only

***EH*** = total hours worked by all employees during the calendar year

***200000*** = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

**Restricted Work Day Rate for 2001 = 4.19**

**N = 4**

**EH = 191,108**

Note: The Restricted Work Day Rate is a subset of, and is included within the Lost Work Time Accident Rate, in accordance with the Bureau of Labor Statistics definition. The Restricted Work Day Rate is for both FG&E's electric and gas divisions.

# **Fitchburg Gas and Electric Light Company d/b/a Unitil**

## **Line Loss Data**

**For the Period January 1, 2005 through December 31, 2005**

The following page provides the annual electric line loss data for Fitchburg Gas and Electric Light Company, for the period January 1 through December 31, 2005. The methodology used for this calculation is consistent with that used to calculate unaccounted for gas. The unaccounted for gas calculation is based on the Company's Gas Allowance for Local Distribution Companies contained in FG&E's Distribution Service Terms and Conditions, M.D.T.E. 109. As defined in Section 2.0 of M.D.T.E. 109, the Company Gas Allowance is the difference between the sum of all amounts of gas received into the Company's distribution system and the sum of all amounts of gas delivered from the Company's distribution system [for the most recent twelve month period ending July 31]. For purposes of calculating the annual electric line loss, FG&E compared the amount of kilowatt-hours received into the system to the kilowatt-hours delivered to customers.

Row A of Attachment K provides, in kilowatt-hours, the amount of electricity metered each month at FG&E's delivery points. Row B provides, in kilowatt-hours, the amount of electricity delivered to customers based on billed amounts. Both Row A and B include kilowatt-hours for FG&E's standard offer service, default service, and externally supplied customers.

Row C shows the difference, in kilowatt-hours, between the amount of electricity received and the amount delivered. This difference includes company use, system losses, and voltage discounts made to certain general service accounts' metered data in accordance with the Company's tariff.

Row D shows the annual electric line loss by month and in total. For the year 2005, the electric line loss is 5.5%. The month-to-month fluctuations are related to cycle differences between the reading at the delivery point, which is based on calendar month, and the billing for all of FG&E's customers, which is spread throughout the month. Generally, actual losses do not vary substantially month to month.

Fitchburg Gas and Electric Light Company

Annual Electric Line Loss Data for the period January 1, 2005 through December 31, 2005

A	kWh Received												
	January 2005	February 2005	March 2005	April 2005	May 2005	June 2005	July 2005	August 2005	September 2005	October 2005	November 2005	December 2005	Totals
	48,972,882	43,494,893	47,621,011	42,626,936	43,751,543	48,283,319	50,497,023	52,031,370	46,313,125	45,192,628	43,672,077	48,534,258	560,991,065
B	kWh Delivered												
	47,172,143	43,614,852	44,618,345	42,153,373	40,020,042	43,527,836	46,420,910	48,275,734	48,059,882	41,682,304	41,182,443	43,301,122	530,028,986
C	Difference (kWh)												
	1,800,739	(19,959)	3,002,666	473,563	3,731,501	4,755,483	4,076,113	3,755,636	(1,746,757)	3,510,324	2,489,634	5,233,136	30,962,079
D	Line Loss												
	3.7%	(0.3%)	6.3%	1.1%	8.5%	9.8%	8.1%	7.2%	(3.8%)	7.8%	5.7%	10.8%	5.5%

Row A: Electricity metered at FG&E Delivery Points (Flagg Pond and Pinetree) as recorded by FG&E's telemetering system (MV-90).

Row B: kWh delivered to customers as recorded in the Company's Monthly Accounting Report

Row C: Difference (Row A - Row B)

Row D: Electric Line Loss (Row C/Row A)

Fitchburg Gas and Electric Light Company d/b/a Utiliti

Annual Electric Line Loss Data for the period January 1, 2004 through December 31, 2004

kWh Received												
	January 2004	February 2004	March 2004	April 2004	May 2004	June 2004	July 2004	August 2004	September 2004	October 2004	November 2004	December 2004
A	50,886,062	44,424,268	46,628,857	43,518,365	44,689,645	45,141,008	47,487,689	49,751,595	44,438,702	43,923,793	42,477,171	47,319,023
<b>Totals</b>												
kWh Delivered												
B	47,061,791	44,740,160	44,804,396	43,489,890	40,381,296	43,115,009	43,220,464	45,792,232	45,856,899	40,383,892	39,324,456	42,639,696
<b>Totals</b>												
Difference (kWh)												
C	3,824,271	(315,892)	1,824,461	28,475	4,308,349	2,025,999	4,267,225	3,959,363	(1,418,197)	3,539,901	3,152,715	4,678,327
<b>Totals</b>												
Line Loss												
D	7.5%	(0.7%)	3.9%	0.1%	9.6%	4.5%	9.0%	8.0%	(3.2%)	8.1%	7.4%	9.9%
<b>Totals</b>												
												5.4%

Row A: Electricity metered at FG&E Delivery Points (Flagg Pond and Pinetree) as recorded by FG&E's telemetering system (MV-90).

Row B: kWh delivered to customers as recorded in the Company's Monthly Accounting Report

Row C: Difference (Row A - Row B)

Row D: Electric Line Loss (Row C/Row A)

Fitchburg Gas and Electric Light Company d/b/a Unitil

Annual Electric Line Loss Data for the period January 1, 2003 through December 31, 2003

A	kWh Received												
	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003	July 2003	August 2003	September 2003	October 2003	November 2003	December 2003	Totals
	49,025,539	43,594,259	44,851,799	40,403,645	40,502,814	43,166,003	47,762,225	48,756,821	42,306,682	44,170,475	43,720,525	47,269,805	535,530,592
B	kWh Delivered												
	47,238,449	43,189,234	41,028,052	39,734,169	38,356,491	38,577,721	44,204,438	45,837,023	42,570,460	40,477,434	39,727,448	45,678,876	506,619,795
C	Difference (kWh)												
	1,787,090	405,025	3,823,748	669,476	2,146,323	4,588,282	3,557,787	2,919,798	(263,776)	3,693,041	3,993,077	1,590,929	28,910,797
D	Line Loss												
	3.6%	0.9%	8.5%	1.7%	5.3%	10.6%	7.4%	6.0%	(0.6%)	8.4%	9.1%	3.4%	5.4%

Row A: Electricity metered at FG&E Delivery Points (Flagg Pond and Pinetree) as recorded by FG&E's telemetering system (MV-90).

Row B: kWh delivered to customers as recorded in the Company's Monthly Accounting Report

Row C: Difference (Row A - Row B)

Row D: Electric Line Loss (Row C/Row A)

Fitchburg Gas and Electric Light Company d/b/a Unitil

Annual Electric Line Loss Data for the period January 1, 2002 through December 31, 2002

kWh Received		January 2002	February 2002	March 2002	April 2002	May 2002	June 2002	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	Totals
A		41,607,689	37,531,394	41,922,506	40,182,190	41,451,756	42,580,805	47,435,953	50,066,195	44,042,664	42,965,515	42,302,212	45,008,429	517,097,308
kWh Delivered														
B		41,680,703	36,198,259	37,039,291	38,863,294	39,453,511	38,305,155	45,022,662	46,548,751	43,980,546	40,154,745	38,893,067	42,667,419	488,816,403
Difference (kWh)														
C		(73,014)	1,333,135	4,884,215	1,318,896	1,998,245	4,275,650	2,413,291	3,517,444	52,118	2,810,770	3,409,145	2,341,010	28,280,905
Line Loss														
D		(0.2%)	3.6%	11.7%	3.3%	4.8%	10.0%	5.1%	7.0%	0.1%	6.5%	8.1%	5.2%	5.5%

Row A: Electricity metered at FG&E Delivery Points (Flagg Pond and Pinetree) as recorded by FG&E's telemetering system (MV-90).

Row B: kWh delivered to customers as recorded in the Company's Monthly Accounting Report

Row C: Difference (Row A - Row B)

Row D: Electric Line Loss (Row C/Row A)



Fitchburg Gas and Electric Light Company d/b/a Unitil

Annual Electric Line Loss Data for the period January 1, 2001 through December 31, 2001

kWh Received		January 2001	February 2001	March 2001	April 2001	May 2001	June 2001	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	Totals
A		45,204,273	39,306,483	41,170,707	36,738,519	38,364,233	40,519,485	39,877,832	45,108,870	38,425,484	39,355,333	37,776,468	40,310,867	482,158,554
kWh Delivered														
B		45,827,956	38,897,432	37,942,628	36,101,840	36,510,313	36,635,116	36,982,684	41,912,711	37,814,166	36,758,040	35,379,602	35,730,690	456,493,178
Difference (kWh)														
C		(623,683)	409,051	3,228,079	636,679	1,853,920	3,884,369	2,895,148	3,196,159	611,318	2,597,293	2,396,866	4,580,177	25,665,376
Line Loss														
D		(1.4%)	1.0%	7.8%	1.7%	4.8%	9.6%	7.3%	7.1%	1.6%	6.6%	6.3%	11.4%	5.3%

Row A: Electricity metered at FG&E Delivery Points (Flagg Pond and Pinetree) as recorded by FG&E's telemetering system (MV-90).

Row B: kWh delivered to customers as recorded in the Company's Monthly Accounting Report

Row C: Difference (Row A - Row B)

Row D: Electric Line Loss (Row C/Row A)

**FITCHBURG GAS AND ELECTRIC LIGHT COMPANY d/b/a Unitil**

**2005 - ELECTRIC**

	DESCRIPTION, LOCATION AND SCOPE OF PROJECT*	TOTAL AMOUNT EXPENDED
1	ELECTRIC T&D IMPROVEMENTS (throughout system) normal additions, upgrades and replacements on FG&E's transmission and distribution systems during 2005. Less: Customer Contributions.	\$596,797.37
2	NEW CUSTOMER ADDITION (throughout system) normal additions on FG&E's distribution system for all work directly associated with new customer load including overhead, underground conductors and devices for 2005. Less: Customer Contributions.	\$563,396.44
3	OUTDOOR LIGHTING REQUIREMENTS (throughout system) normal additions for new and upgraded lighting installations for 2005.	\$127,332.03
4	EMERGENCY & STORM RESTORATIONS (throughout system) charges incurred as a result of interruptions, trouble calls and storm restoration for the year 2005	\$156,948.33
5	BILLABLE WORK REQUIREMENTS (throughout system) work covering CATV, motor vehicle accidents, and other miscellaneous property damage work. Less: Customer Billing for 2005.	\$304,877.93
6	TRANSMISSION AND DISTRIBUTION TRANSFORMER - CUSTOMER REQUIREMENTS (throughout system) additions and retirements of distribution transformers due to planned and scheduled customer requirements, including single and/or three phase replacement cost for 2005.	\$496,764.33
7	METER CUSTOMER REQUIREMENTS (throughout system) additions and retirements of electric meters due to planned and anticipated scheduled company requirements for 2005	\$161,463.08
8	UPGRADE SECONDARY NETWORK AND INSTALL NETWORK FEED ON CIRCUIT 20H24 - upgrade of secondary network cable to eliminate the unshielded, 5kv underground cable in downtown Fitchburg and installation of network feed to serve Fitchburg Savings Bank.	\$127,400.78
9	POLE REPLACEMENT PROGRAM 2005 (throughout system) replacement of 50 joint and sole owned poles in the FG&E service territory. All single phase pole to construction, open wire secondaries, secondaries, service drops and associated equipment.	\$288,137.37
10	REPLACE FAILED 22W17 PRIMARY CABLE - replacement of 240 ft of 350 MCM 3 conductor PILC cable with 720 ft of 350 MCM 15kv single conductor between manholes 37A and 38A on Main Street in Fitchburg.	\$53,343.89
11	09 LINE POLE REPLACEMENT - replacement of 25 poles on the 09 Line between Pleasant Street (L) and West Townsend (T) substations identified as condemned as well as the replacement of insulators, grounds, guy wires, and anchors as necessary.	\$463,491.17
12	DISTRIBUTION CAPACITOR INSTALLATIONS - install approximately 9 MVAR of cumulative power factor correction capacitor additions to maintain compliance with ISO power factor standards in the FG&E service territory.	\$188,165.06
13	CIRCUIT 1W4 AND 11W11 DIRECT BURIED CABLE REPLACEMENTS - replacement of two 3 phase sections of underground cable, including associated conduit and material, at the intersection of Electric Ave and South St in Fitchburg with 500 CU XLP 220 mil 15kv cable for circuits 1W4 and 11W11.	\$170,918.04
14	INSTALL THREE PHASE UNDERGROUND PRIMARY FOR HOUSING DEVELOPMENT - install a three phase primary underground line extension with 3 single phase loop feed taps and make elbow terminations along with the installation of secondary mains, mole connections, and sectionalizer cabinets as part of Phase 2 for Bridle Cross Estates Development in Fitchburg.	\$84,584.06
15	OAK RIDGE DEVELOPMENT - install a 3 phase overhead tap and loop feed underground line extension including secondary mains and services to a 118 unit condo development in Fitchburg.	\$77,783.90
16	SUMMER STREET LAND PURCHASE - land purchase at Summer Street for future supply station substation.	\$363,298.30
17	FIXED NETWORK AUTOMATIC METER READING SYSTEM - purchase and installation of a fixed network, power-line carrier, automated meter reading system including meters, AMR endpoints, substation hardware, command center software and associated installation costs.	\$1,647,557.38
	<b>Total</b>	<b>\$5,872,259.46</b>

\*FG&E has defined major capital expenditures to be those in excess of \$50,000. Data for prior years was included in FG&E's 1st Annual Report.

**SUBJECT: Critical Spares Policy (Electric)****EFFECTIVE: 01/01/2002***ISSUED BY: G. Appleton**CONTENT BY: R Bisson, T. Biklen, M. Deschambeault,  
P. Stagno, S. Shepard*

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**1.0 PURPOSE**

This bulletin establishes the requirements for inventorying critical spare parts and components for in-service energy delivery equipment. Specifically, this bulletin establishes the criteria and conditions for carrying an inventory of spare parts that would be deemed critical.

**2.0 SPARE PARTS CLASSIFICATION & DEFINITION**

Spare parts are classified as either Critical Spares or Non-Critical Spares.

**Critical Spares**

Critical spare parts are defined as inventoried parts that are immediately available as replacements for failed components. Critical spares are inventoried for only those components that if failed, would result in service interruption to customers or diminished use or availability of the energy delivery system. Specifically, the component failure would cause the loss of service to customers, the loss of equipment use, the loss of a system's availability, or result in the energy delivery system to be operated in a sub-optimal first contingency basis until the component or affected equipment is replaced or repaired.

A sub-optimal first contingency basis means operating the energy delivery system:

- When there is an increased outage exposure to a significant number of additional customers

- When protection may not be fully coordinated or may result in not isolating faulted portions of the system prior to the occurrence of significant damage.
- When a mobile substation would be installed for a period of time greater than 2 weeks.
- When an automatic transfer scheme may require disabling.
- When conditions prevent full compliance with ISO-NE / NEPOOL operating requirements.

It is the company's intention to minimize the time that the energy delivery system is operated in such a configured manner. Accordingly parts and components that require inventorying in order to minimize this manner of operation are classified as critical spares.

### **Non-Critical Spares**

Non-critical spare parts are defined as inventoried parts that are available as replacements for in-service components. Non-critical spares if failed, would result in operating the system on a first contingency basis where the affected equipment or system is not available but does not significantly increase outage exposure to additional customers. Additionally, the loss of the equipment or the system availability would be for a short period of time and does not result in operating the system on a sub-optimal basis. Included in this classification are consumable supplies used to perform periodic, routine maintenance, and are generally not returned to the stockroom. Such items include cleaning solvents, lubricants, and temperature control and actuating fluids and general use hardware.

It is not the intent of this policy to establish guidelines for identifying and inventorying non-critical spare parts.

## **3.0 REQUIREMENTS FOR CRITICAL SPARES**

All critical spares, regardless of cost, shall meet the following requirements:

- The spare part shall meet the classification definition in Sec 2.0, above.
- The spare part shall be used to replace a component that is unique to the equipment and essential to the equipment operation.
- The failure of the essential component must render the equipment or system inoperable and force its removal from service.

- No other part, component or subsystem exists as a functional or economically viable substitute for the part.

Certain spare parts may be multi-functional or may be viable replacement components for a large number and variety of equipment or systems. Critical spares that meet component replacement requirements for multiple systems and equipment shall be stocked in preference to sole function critical spare parts.

It is recognized that items used in the course of routine or planned construction may be used to replace parts that have failed and rendered equipment or a system inoperable. Such items are usually stocked in quantities sufficient to meet both emergency and planned work requirements. These items shall not be classified as critical spares. In the event that emergency use of such items exceeds planned use, a re-evaluation of the stock classification for the item will be made.

Critical spares will only be used when a component failure occurs. Critical spares shall not be used for planned maintenance or planned construction work. In most instances, there is a high probability that a critical spare will not be needed or used during the operational lifetime of the equipment or the system. In the relatively rare event that a piece of equipment or system experiences a failed component resulting in the permanent use of a critical spare, an order shall be issued to obtain a replacement critical spare part to be placed in inventory.

#### **4.0 CRITICAL SPARE STOCKING METHODOLOGY**

The decision to stock at least one unit of a given type of a critical spare shall be determined using an equipment and service availability criteria and a system impact criteria. The on-hand quantity for a specific critical spare component shall be determined using an inventory control model criteria. The inventory control model establishes the critical spare stocking levels assuming an exponential distribution of failure free operating time, an exponential distribution of re-supply lead time, the quantity of in-service parts deemed to be classified as critical and an inventoried part availability service level of 95%.

##### **Equipment Availability Impact Criteria**

The reliability of the energy delivery system is dependent upon the availability of the equipment, systems and components that make up the system. Equipment, lines and systems are not available for service when a component or part has failed. Determining a component failure rate is necessary for determining stocking levels for critical spares.

##### **Failure Rate:**

The identification of critical spares and inventoried quantities for in-service components is based upon the premise of equipment reliability or a very high failure free operating

time. Such equipment and systems must be supported with sound preventative maintenance and spare parts availability. Accurately predicting a component failure rate is required to establish a cost efficient and effective critical spare parts inventory.

The failure rate of the part can be determined from the historical reliability data for the component. Analysis of equipment component failures, equipment maintenance history, equipment in-service duty and equipment in-service performance can be used to estimate a failure rate. Equipment that is new or no historical operational data is available, information regarding the component availability should be obtained from the equipment manufacturer, from other utilities, utility associations or sources. Experience with similar equipment placed into service under similar operating conditions may provide information regarding component rate failure predictability.

A failure rate must be determined and established for any in-service component or part that is to be supported by a critical spare. The failure rate is measured and quantified as a mean failure free operating time of the component or spare part. Operational performance records that include hours of failure free operating time shall be recorded for in-service components that are supported by a critical spare.

### **System Impact Criteria**

The failure of critical spare parts could adversely impact system operating conditions causing service interruption to customers or diminished use or availability of the energy distribution system. Prolonged operation of the system in such a manner creates conditions that put customers at a high risk of having service interrupted. These operating conditions must be limited to minimum amounts of time. Accordingly critical spare inventories shall be established and maintained for components that may fail in service and result in the following conditions:

- loss of service to customers
- operating conditions that prevents compliance with ISO-NE / NEPOOL operating requirements
- energy delivery system being operated in a sub-optimal first contingency basis
- a mobile substation placed into service for a period of time greater than two weeks

### **Inventory Control Model**

The on-hand quantity for a specific critical spare component shall be determined using an inventory control model criteria. The inventory control model establishes the critical spare stocking levels assuming an exponential distribution of failure free operating time, an exponential distribution of re-supply lead time, the quantity of in-service parts deemed to be classified as critical and an inventoried part availability service level of 95%.

The chart shown in FIGURE 1 establishes the inventoried quantity for a specified critical spare for the designated service level of 95%. The horizontal axis indicates the calculated ratio of the mean lead-time for re-supply or acquisition of a critical spare to the failure free operating time of an in-service critical component. The mean lead-time is the duration of time between the spare part order time and spare part receipt time. The Mean failure free operating time is the period of time between failures of a specific in-service component. The vertical axis indicates the number of critical components in-service.

The inventory model calculates and graphs a stepped boundary that separates the quantity of critical spares to be inventoried based upon a calculated spare part mean lead-time to mean failure free operating time ratio for a given number of in-service components.

The graph further indicates that the quantity of inventoried spares changes very little over a wide range of operating parameters such as part lead-time, component failure rates and in-service component quantities. A single graph can be used to establishing stocking quantities for many critical spares.

The graph depicts a simplified way in which to determine spare part quantities. The inventory model used to create the graph employs a complex set of calculations based upon exponential distributions around calculated means and probabilities that considered several occurring conditions. Several assumptions that were made when establishing this inventory control model. Most of the assumptions were conservative and were made to simplify the model. Assumptions

- A unit of in-service equipment utilizes critical spares in quantities of one. It is recognized that certain in-service equipment utilizes critical spares in quantities greater than one. The inventoried quantity for these critical spares must be adjusted to account for multiple component use by a single unit of equipment.
- All critical spares are acquired from a single supplier. No alternative supply of the part was considered such as an alternate supplier or borrowing the part from another utility.
- All failed components are to be discarded. No failed components were assumed to be refurbished and placed into inventory
- The model is based upon an in-service of equipment availability premise not a total down time cost premise that include transaction charges and inventory carrying charges.

# Number Of Spares For A Service Level Of 95%

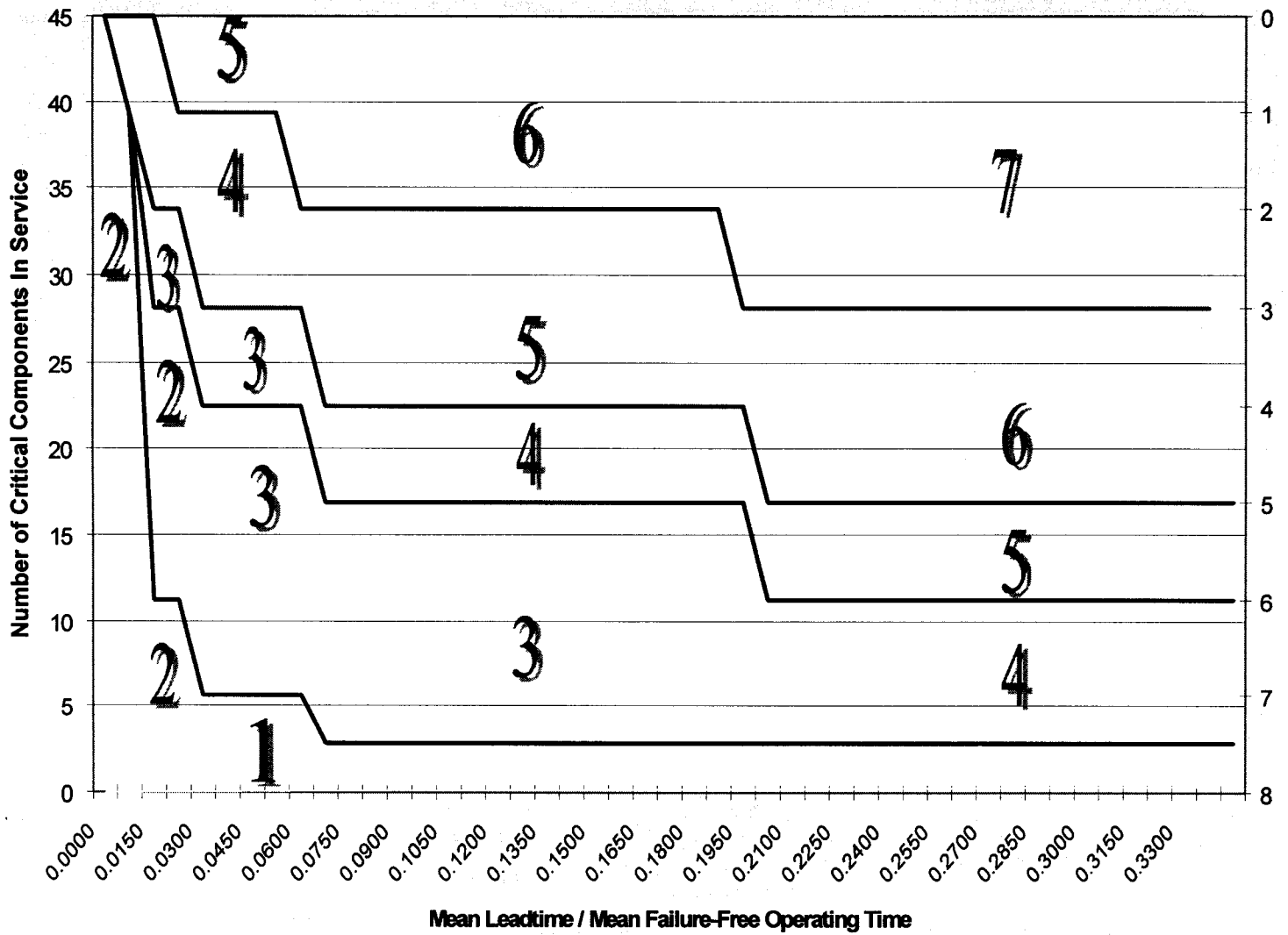


FIGURE 1



# Fitchburg Gas and Electric Light Company d/b/a Unitil

## Customer Surveys: 2005\*

### Residential Customer Satisfaction - Random (Scale 1 - 7)

Response to the question: "Overall, how satisfied are you with the service you are receiving from Unitil/Fitchburg Gas & Electric?"  
(Scale 1 - 7: 1-Dissatisfied; 7-Satisfied)

<b>Response Value</b>	<b>Number of Responses</b>	<b>Weighted Response</b>
1	12	12
2	8	16
3	12	36
4	15	60
5	29	145
6	49	294
7	<u>45</u>	<u>315</u>
<b>Total</b>	170	878
<b>Average</b>		<b>5.2</b>

### Customer Satisfaction - Specific (Scale 1 - 7)

Response to the question: "How satisfied were you with the service you received from our Customer Service Department?"  
(Scale 1 - 7: 1-Dissatisfied; 7-Satisfied)

<b>Response Value</b>	<b>Number of Responses</b>	<b>Weighted Response</b>
1	10	10
2	7	14
3	4	12
4	21	84
5	24	120
6	52	312
7	<u>91</u>	<u>637</u>
<b>Total</b>	209	1,189
<b>Average</b>		<b>5.7</b>

\*Survey changes to conform to DTE requirements implemented during 2002.

# **Fitchburg Gas and Electric Light Company d/b/a Unitil**

## **CAIDI: 1996-2005**

<b>Year</b>	<b>CAIDI by Year (min.)</b>	<b>CAIDI by Year (min.)</b>
<b>2005</b>	<b>68.89</b>	<b>70.75</b>
<b>2004</b>	<b>94.08</b>	<b>86.53</b>
<b>2003</b>	<b>79.62</b>	<b>78.25</b>
<b>2002</b>	<b>94.60</b>	<b>87.53</b>
<b>2001</b>	<b>75.42</b>	<b>42.68</b>
<b>2000</b>	<b>134.32</b>	<b>85.56</b>
<b>1999</b>	<b>83.52</b>	<b>81.47</b>
<b>1998</b>	<b>97.75</b>	<b>88.13</b>
<b>1997</b>	<b>70.24</b>	<b>72.90</b>
<b>1996</b>	<b>312.93</b>	<b>66.14</b>

<sup>1</sup> Includes all reliability data for 1996-2005.

<sup>2</sup> Equals TOTALS minus D.T.E. assumptions for calculating electric reliability measures.

**Fitchburg Gas and Electric Light Company d/b/a Unitil  
Annual Major Outage Events 2005**

October 13-14, 2005 02 Line Outage	10/13/2005 23:43	10/14/2005 0:25	4924	Fitchburg	42 mins.	normal
October 15-16, 2005 State of Emergency	10/15/2005 11:00	10/16/2005 11:00	1505	Forest Park, Fitchburg New West Townsend Rd., Fitchburg Northfield Rd., Lunenburg Turnpike Rd., Ashby Burrage St., Lunenburg Northfield Rd., Lunenburg West St., Lunenburg	180 mins.	normal

## **Subject: Vegetation Management**

**Effective: January 1, 2001**

*Issued by: G. Appleton*

*Content Team: S. Balch, R. Abel, S. Wade ,  
R. Letourneau, Jr.*

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### **1.0 Purpose**

To establish a standardized vegetation management program for the Unitil system companies in order to insure consistency and the best practices approach in achieving reliable operation of the overhead T&D systems.

### **2.0 Scope**

This bulletin applies to the vegetation management program for all Unitil electric energy distribution systems and provides the required guidelines, necessary standards, and performance measures necessary for a continuing assessment of the effectiveness of the program.

### **3.0 Table of Contents**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Table of Contents
- 4.0 Methods
  - 4.1 Transmission Vegetation Control
    - 4.1.1 Cycle
    - 4.1.2 Selective Trimming
    - 4.1.3 Herbicide Application
    - 4.1.4 Mowing
    - 4.1.5 Side-Cutting
  - 4.2 Distribution Vegetation Control
    - 4.2.1 Cycle
    - 4.2.2 Danger Trees

- 4.2.3 Maintaining Services
  - 4.2.4 Customer Trimming Request
  - 4.2.5 Intercompany Operating Procedures
- 5.0 Standards
  - 5.1 Conductor Clearances and Specification
- 6.0 Performance Metrics
  - 6.1 Effectiveness Metrics
  - 6.2 Efficiency Metrics
  - 6.3 Daily Timesheet/Tracking
  - 6.4 Monthly Reporting & Map Updating
  - 6.5 Supervision
- 7.0 Budgeting Criteria
  - 7.1 Annual Costs
  - 7.2 Determining Volume of Work
  - 7.3 Vendor Selection
  - 7.4 Hot spot trimming
  - 7.5 Customer trimming request
  - 7.6 Competitive Bidding

## **4.0 Methods**

Vegetation management methods apply to both Unitil's Transmission system and Distribution system. Transmission methods and frequency differ from distribution methods due to the fact our transmission system is, for the most part, off-road and located within rights-of-way. The topography, land-use, the company's rights, and the fact our transmission system is the backbone of a reliable energy delivery system dictate more aggressive trimming methods and also various types of vegetation control. The Distribution methods, although not as aggressive as Transmission, still require minimum line clearance specification, however with less variation in trimming methods. The following sections describe approved methods of vegetation control.

### **4.1 Transmission Vegetation Control**

Transmission vegetation control is defined as the process and methods utilized to maintain the company's rights-of-way. Because the transmission system is an integral component of a reliable energy delivery system, and because of the higher voltages of our transmission lines, tree and limb contact must be completely eliminated through inspection and trimming programs. The higher voltages are less tolerant to tree and/or limb contact and added clearance is preferred. Added clearance is also preferred to speed transmission foot patrols during routine maintenance inspections or during outage situations where a fault has occurred and the ability to quickly isolate the fault is necessary to sectionalize the line or begin immediate repair work in order to minimize outage time to our customers.

Several methods will be described in this bulletin. Although not any one single method is the most effective, the distribution company shall endeavor to deploy the most efficient and effective method of vegetation control based upon the topography of the land, types of vegetation in terms of growth rates, the company's rights, state and federal law, and any other regulations which may apply.

#### **4.1.1 Transmission Cycle**

Transmission vegetation control shall be completed on a 5-year cycle. This results in the maintenance of one-fifth of the transmission system on an annual basis. The determination of the amount of trimming may be calculated based upon the pole miles of transmission line or acreage. Since many of our rights-of-way have more than one line, and because many rights-of-way can accommodate more than the existing facilities, the preferred unit of measure shall be acres. The acres unit of measure accommodates varying line configurations as well as varying widths of right-of-way. Therefore all planning and reporting of transmission vegetation control shall utilize acres as the standard unit of measure.

#### **4.1.2 Selective Trimming**

Selective trimming is defined as tree removal in the transmission right-of way employing conventional methods. Conventional methods include the identification of the tallest vegetation within the right-of-way and removal of such vegetation utilizing various saws and chippers/shredders. This method has several benefits including no restrictions on topography since personnel often walk the right-of-way, transporting all the required equipment by hand.

#### **4.1.3 Herbicide Applications**

The spraying of herbicides by certified contractors has shown to be a cost effective vegetation management tool. Increased regulation in this area has resulted in an increased administrative burden. However at this time the additional responsibilities have not outweighed the resulting benefits. Therefore this method continues to be a preferred method of transmission vegetation control for Unitil Companies.

Careful planning and accurate records are required in order to properly execute a successful herbicide program. Knowledge of federal and state laws as well as local ordinances need to be researched to determine proper application. Because laws between Massachusetts and New Hampshire could vary, this Operations Bulletin will not address one specific method. Instead the bulletin will outline the steps currently utilized by one New Hampshire DOC. These steps are as follows:

1. Obtain herbicide permit from the NH Department of Environmental Services. This is the responsibility of the certified contractor performing the spraying.
2. By means of certified mail, notify the selectmen, mayor, or town manager in the city or town where the rights-of-way are located.
3. Notification to the public through the use of notices in one newspaper of statewide circulation and in all newspapers of local circulation.
4. Notification through billing stuffers, by telephone, or in person each abutter along the right-of-way where herbicides are to be applied. Abutters shall be offered alternative vegetation management, i.e. mechanical clearing. This is New Hampshire state law (RSA 374:2-a) and the wishes of the landowner shall take precedence.
5. Posting signs every 200 feet along the perimeter of the right-of-way where herbicides are to be applied.

New Hampshire State law further stipulates the format of the newspaper advertisements, including specific information required for publication as well as a requirement that the advertisement be a "coupon" that may be clipped and mailed back to the utility.

The information provided in this Operations Bulletin shall be used as a guideline and is **not intended to be all-inclusive**.

Herbicide applications are not practical for all applications. For example, rights-of-way that include a large percentage of farmlands, or rivers/streams would not be conducive to herbicide use. However for many applications, herbicide use continues to be an efficient, cost-effective method of controlling growth along Unitil's rights-of-way.

#### **4.1.4 Mowing**

The mowing of transmission rights-of-way is defined as the mechanical removal of vegetation using various motorized apparatus that may be attached to off-road equipment. The topography must be free of rivers and large streams since the equipment is unable to cross such obstacles. Several vendors have become proficient in this method and Unitil has contracted with them with favorable results.

#### **4.1.5 Side-Cutting**

Side cutting is defined as vegetation control at the edge of the right-of-way. Side cutting shall be utilized in conjunction with other forms of vegetation control and is therefore not a practical transmission vegetation control method on a stand-alone basis. In other words, side-cutting supplements transmission vegetation control methods utilized to control vegetation within the right-of-way.

Tree limbs that grow from outside the actual right-of-way can jeopardize the integrity of the transmission system and therefore must be removed. Furthermore, dead and danger trees also pose risks. Dead trees may fall into adjacent trees at the edge of the right-of-way, leaning towards the transmission line posing a threat to the transmission line itself. Danger trees, defined as dying trees that have weak limbs or trunks, may also pose similar risks. Side cutting is designed to eliminate these threats.

## **4.2 Distribution Vegetation Control**

Distribution vegetation control is defined as the systematic removal of vegetation growth along Unitil's distribution circuits. The majority of distribution circuits are along the roadway and unlike transmission methods, distribution methods are not as varied and are usually performed from a bucket truck using various sawing techniques. In addition to trimming trees, the identification and removal of danger trees is also a significant part of vegetation control.

Distribution vegetation control shall be scheduled by circuit and voltage class.

Conductor clearances detailed within the specification shall be strictly followed. However, it is recognized that, from time to time, proper permissions may not be granted from property owners. In addition, scenic road designations may preclude the achievement of specified clearances. Permission problems and/or scenic road designations shall be well documented on daily timesheets (See Section 6.3, Performance Metrics) for auditing purposes.

### **4.2.1 Distribution Cycle**

Distribution vegetation control shall be completed on a cycle according to the following table:

<b>Voltage Class</b>	<b>Cycle</b>
4 kV	8 years
13.8 kV	5 years
34.5 kV	4 years

The determination of the amount of trimming shall be calculated based upon the pole miles of distribution circuits, by voltage class, excluding secondaries and services. These figures shall be determined based upon the annual statistical report compiled by individual distribution operation centers (DOCs).

### **4.2.2 Danger Trees**



Danger trees are defined as dead or dying trees that pose a threat to distribution circuits upon their failure. These dead trees or limbs may break away at any time, fall into the circuit and result in damage to our facilities. Managing dead trees requires identification and removal at the earliest possible stage. Methods for removal include flat cutting the entire tree or removal of the problem branches. The objective is to ensure that if the tree failed, the integrity of the distribution circuit will be maintained.

Third party participation shall be pursued in all danger tree removals prior to commencement of the program. Participation is based upon the current Intercompany Operating Procedure as detailed in Section 4.2.5 of this Operating Bulletin. Reimbursement provides significant payment to Unitil allowing for further funding of the Vegetation Management Program. Refusal of participation shall be properly documented.

#### **4.2.3 Maintaining Services**

Service shall be reviewed for trimming on the same cycle and concurrently to the distribution primary circuit. Services and secondary pole lines shall not be trimmed unless a tree/branch is directly in contact with the conductor. For the purpose of record keeping and metric evaluation, services and secondary pole lines trimmed shall be categorized as unscheduled work.

#### **4.2.4 Customer Trimming Requests**

Customer requested service trimming requires careful assessment and management. These requests, if not handled properly, may result in a significant resource commitment both in terms of dollars and administrative labor without a proportional benefit to outage and/or damage prevention. In addition, improperly managed requests may result in negative customer sentiment.

Each request shall be individually reviewed in the field after a discussion with the customer reveals that a potential problem exists. Only those services that have significant contact with vegetation and/or are in harms way due to danger trees shall be trimmed. All other service shall not be trimmed. The customer shall receive notification as to the position of the company and shall also receive a complete explanation as to the decision.

#### **4.2.5 Intercompany Operating Procedures**

The purpose of the Intercompany Operating Procedure is to establish a definite method of allocating costs of trimming associated with both construction and maintenance of joint pole lines.

Maintenance trimming shall be done on a joint basis. When it is agreed both parties will benefit, the division of costs shall be 75% Unitil and 25% telephone.

Heavy storm work shall be handled immediately without prior review. The parties agree to a reciprocal acceptance of each other's tree contractors for heavy storms on a 50%/50% basis, provided field representatives, as soon as practicable after a major storm, meet to communicate cities/towns, streets, and lines trimmed as a result of said storm. Subsequent bills to include the same information.

Lastly, removal of danger trees including large limbs that threaten both parties' facilities shall be removed on a 50%/50% basis, subject to prior field review wherever possible (see Section 4.2.2 of this Operating Bulletin).

## 5.0 Standards

Standards refer to required conductor clearances relative to vegetation growth. In all cases these standards shall be realized unless designated scenic roads and /or appropriate permissions from landowners can not be obtained.

## 6.0 Performance Metrics

In order to measure the effectiveness of the trimming program, data shall be collected on a continuous basis and performance metrics shall be calculated and published, by DOC, on the Operations Systems web page. Comparative analysis shall allow for continued improvement in vegetation control methods and techniques. Responsibility for the collection of data, accurate and timely reporting, and comparative analysis shall rest with the DOC's respective Safety and Facilities Coordinator. Performance metrics shall be updated no less than once per month.

### 6.1 Effectiveness Measures

In order to monitor the effectiveness of the transmission trimming program, each DOC shall record the **total number of momentary or permanent outages** experienced on our transmission system on a monthly basis. Only those momentary and permanent outages related to tree or limb contact are utilized for this metric. Additionally, only those trees and limbs that are within the trim zone shall be included. The metric is expressed as follows:

**Transmission Effectiveness = Total number of momentary or permanent outages**

The logic behind the measure is that an effective transmission trimming program shall have the objective of minimizing these types of interruptions.

In order to monitor the effectiveness of the distribution trimming program, each DOC shall record the **number of tree-related outages, by voltage class**, on a monthly

basis. This number shall be divided by the **total number of pole miles per respective voltage class** in the DOC as described in Section 4.2.1. The quotient, expressed as follows, shall comprise the effectiveness measurement for distribution vegetation control:

$$\text{Distribution Effectiveness} = \frac{\text{Number of tree-related outages (by voltage class)}}{\text{Total number of pole miles (by voltage class)}}$$

The logic behind the measure is that an effective trimming program shall have the objective of minimizing tree-related outages.

## 6.2 Efficiency Metrics

Efficiency metrics are designed to compare costs and ensure that resources are deployed in a manner that achieves the greatest amount of trimming for the dollars expended.

For Transmission efficiency, each DOC shall record **dollars expended** and **acres maintained**. The quotient, expressed as follows, shall comprise the effectiveness measurement for transmission vegetation control:

$$\text{Transmission Efficiency} = \frac{\text{Total dollars expended}}{\text{Total acres maintained}}$$

For Distribution, each DOC shall record **dollars expended** and **sections of primary conductor trimmed**. The quotient, expressed as follows, shall comprise the effectiveness measurement for distribution vegetation control:

$$\text{Distribution Efficiency} = \frac{\text{Total dollars expended}}{\text{Number of sections trimmed}}$$

The **number of sections trimmed** shall also include services. In other words, one service is equal to one section.

The logic behind this measurement is that the most efficient crews shall be more productive and able to achieve the lowest cost per section of circuit trimmed.

## 6.3 Daily Timesheet Information

All vendors performing maintenance or construction trimming shall complete daily timesheets.

This timesheet is designed to collect the necessary data that will be utilized to process vendor invoices and to calculate performance metrics. It shall be the responsibility of the Manager, Electric Systems to ensure the timesheets are completed daily, and that all required information is included.

Information on the daily timesheet includes:

**General Information:**

- Date
- Street
- Town
- Circuit
- Voltage

**Pole Numbers**

- Company pole number
- Telephone pole number

**Quantity of work:**

- Number of sections trimmed
- Number of services trimmed

**Type of work:**

- Scheduled work
- Unscheduled work
- Construction related
- CWO number
- Storm work
- Other trouble
- Customer Trim Request

**Type of Clearing:**

- Trees trimmed – L (light), M (medium), H (heavy)
- Ground Cut
- Dead/Hazardous trees or limbs removed

**Type of Construction:**

- 1 – Single Phase, 2 – Two Phase, 3 – Three Phase
- Secondary Only
- Service Only

**Time:**

- Labor
- Equipment/Vehicle

#### Telephone Participation

- 75/25
- 60/40
- 50/50
- None

### **6.4 Monthly Reports & Map Updating**

Monthly progress reports shall be available on the Operations System web site. These reports shall provide specific information regarding the status of individual DOC vegetation management programs. Information shall include annual schedules for transmission and distribution programs, scheduling status, and performance metrics. The report will be completed by individual DOC and then rolled into one single, Unitil system report.

It shall be the responsibility of the Safety & Facilities Coordinator to update the Operations System web site no less than once per month.

In addition, each DOC shall utilize circuit maps as a means to track circuit trimming. These maps shall detail the specific locations that our facilities were trimmed along with appropriate dates. These maps shall remain on file for at least one complete cycle.

### **6.5 Supervision**

The Safety & Facilities Coordinator shall be responsible for developing schedules and monitoring the progress of said schedules. The Manager, Electric Systems, shall be responsible for monitoring the efficiency and effectiveness of the contract crews, ensuring that their productivity and quality are as expected.

Any knowledgeable DOC employee may perform monitoring of the contract crews. Monitoring includes live field visits and post-audit inspections. The results of these field visits and audits shall be reported to the Manager, Electric Systems.

### **7.0 Budgeting Criteria**

Transmission and Distribution Trimming budgets shall be completed annually based upon the scheduled cycle, volume of trimming, as well as an estimate of unscheduled work. On an annual basis, Unitil engineering shall review circuit reliability and provide each DOC with recommendations for circuit trimming. This analysis includes a review of trouble reports in order to identify problem areas with the ultimate objective of improving the System Average Interruption Duration Index, or SAIDI. This analysis shall be completed during the annual capital budgeting process. The DOC shall

endeavor to complete the identified trimming projects as early as possible in the fiscal year so that the SAIDI benefit may be realized as soon as possible.

### **7.1 Annual Costs**

Annual costs shall be based upon the volume of work required for that cycle year and the amount of expected trimming, including both scheduled and unscheduled work. Either acres (for Transmission) or pole miles (for Distribution) shall be utilized in conjunction with the costs recorded for the performance metrics detailed in Section 6.0. It is also necessary to pre-select trimming methods, i.e. side-cutting, herbicide application, mowing, etc., before commencement of a budget.

### **7.2 Determining Volume of Work**

In order to determine the volume of work, the amount of vegetation growth needs to be established. The type of clearing (Light, Medium, and Heavy) can only be determined by field inspection. Prior to budgeting, the areas to be trimmed shall be inspected to determine vegetation growth. The information from this inspection shall then be utilized to calculate required resources for the cycle year.

In an area where it is anticipated that work shall be placed out to bid, Unitil shall endeavor to perform such bidding in advance of the actual budgeting process. This will allow for more accurate budgeting.

### **7.3 Vendor Selection**

Criteria for vendor selection shall be based upon cost and performance. It is also strongly recommended to select a vendor that is able to provide additional resources during storm events.

On an annual basis, Unitil shall solicit request for proposals from local tree contractors. These proposals shall include a listing of personnel and equipment, along with any ancillary services the vendor may provide. Other selection criteria include the safety record of the vendor and minimum insurance requirements as set fourth in Unitil Policies. The DOC management will then evaluate the proposal and select an appropriate vendor.

### **7.4 Competitive Bidding**

Competitive bidding is an effective method for performing either maintenance trimming or construction trimming. Not all work is conducive to bidding. In most cases, the best utilization of competitive bidding is for work that is confined to a definitive scope. Work included is this is as follows:

- Complete circuit trimming
- Off-road trimming
- Long line extensions along public way
- Major system improvements such as voltage conversions
- Specialty trimming (mowing, herbicide application)

### **7.5 Hot Spot Trimming**

From time to time “hot spot” trimming (unscheduled work sections) is required due to tree contact and or multiple outages as a result of tree contact. This usually happens off cycle as a result of increased vegetation growth or non-compliance with standards during normal cycle maintenance.

It is important that hot spot trimming is carefully managed as this practice is inefficient and results in increased costs. It is recognized that hot spot trimming is a necessary part of vegetation control, but its use shall be minimized to the extent possible.

## Poor Performing Circuits: 2005

## 2005 Worst Performing Circuits (with exclusions taken) <sup>1</sup>

[illegible]